

*A Guide to - - -*

# HEALTH UNIT PROCEDURE

*- - - in Ceylon*

*by*

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## **PREFACE TO THE SECOND EDITION**

**H**EALTH Units have been in existence in Ceylon since July, 1926, a period of 22 years, and the results achieved have justified their establishment. All health work now is based on Health Unit principles.

This " Guide to Health Unit Procedure in Ceylon " has served a very useful purpose and now it is out of print. Many requests have been received for copies from health officials both locally and from abroad.

The " Guide " was published 12 years ago and the many advances made in Public Health procedure since then have necessitated its revision. This has been undertaken by one of the authors (Chellappah) in the absence of the other from the East. Opportunity has been taken to revise it thoroughly and also to add some new material. Further, the presentation of the material has been much improved to make it more readable. It is felt that with the great interest that is being taken by neighbouring countries to improve their Public Health programmes this volume, epitomizing the Public Health procedure in Ceylon which has yielded such good results, will be found of value.

I have gratefully to acknowledge the assistance given in the revision by Dr. C. T. Williams, acting Assistant Director of Sanitary Service, Mr. V. Kanapathippillai, Head of the Clerical Section of the Public Health Branch at the Head Office, and Mr. Arnold Gurusinghe, the Publicity Officer of the Department of Medical and Sanitary Services.

It is hoped that this " Guide " will further influence health procedure in a wider field.

S. F. CHELLAPPAH.

" Arunthathi "  
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# A GUIDE TO HEALTH UNIT PROCEDURE

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## CHAPTER I

### SELECTION OF FIRST AREA

**I**N selecting the first area in Ceylon the following requirements were considered to be important:—

1. The leading people should earnestly desire the work. Unless this frame of mind is present or secured by visits and conversations, it would hardly be worth while making the attempt.
2. The early and active co-operation of officials should be secured.
3. The location should be—
  - (a) at a district administrative centre;
  - (b) at or near the seat of the Central Government in order that the work—
    - (i) can be given supervision by higher officers and guided along proper channels;
    - (ii) can be frequently inspected and visited by officials; and
    - (iii) is easily accessible as a demonstration to visitors and others who are interested.
4. The area should contain—
  - (a) the usual health problems of the country;
  - (b) a reasonable amount of prosperity and educational advancement;
  - (c) town, village, and rural populations: if the first unit embraces all groups, the work can be applied in any part of the country;
  - (d) the desired number of people (about 40,000 in the beginning): if the population is small, the overhead expense is great and the numerical data collected are insufficient for proper statistical analysis;
  - (e) good roads: a Medical Officer of Health spends most of his time in the field in contact with the people of his area. It should be possible for him and his staff to reach them easily and promptly;
  - (f) a hospital which will supply medical and surgical treatment for the sick and assist in correcting defective children.
5. All organized towns and villages in the area should contribute financially up to their capacity. If necessary, they should pass laws to enable the Medical Officer of Health to carry out the required work.



6. The first area should be developed with the idea of utilizing it as a training centre for all public health staff. It is economical to have a training station in the country as it avoids the expense of sending officers away and enables them to study the home problems in the home environment.

In selecting succeeding areas all the points enumerated above cannot be included, but a unit should not be established in any community which does not evince an active interest in the subject and show a desire to co-operate in every way. The local authority and other responsible people of the locality can give the necessary assurances.

## CHAPTER II

### CO-OPERATION OF THE PUBLIC

**T**HE co-operation of the people is so important that it is given every emphasis. It is now generally known that public health work done by compulsion is not on a sound foundation. A Health Unit should be able to carry out most of its work without being compelled to undertake prosecutions. A legal conviction makes enemies and settles only one item.

To get lasting results the work must be placed on a co-operative basis which is the foundation of the Health Unit system. Co-operation is obtained by carefully explaining in lectures and personal conferences and house-to-house visits the objects to be attained and the assistance which those concerned may give in helping to carry out the programme. Types of co-operation which have been given are—

**Community.**—(i) Social Service organizations are formed to assist in promoting child welfare work. Sub-Committees are named for each health centre and a member attends the weekly clinics at the centre, arranges for the distribution of milk to those needing it, and conducts the sewing activity of the little-mothers' classes. The leagues are supported by donations, monthly contributions, and special collections, and their activities are not a charge against the Health Unit budget. Local leagues furnish buildings as centres for holding the weekly clinics.

(ii) Members of Co-operative Societies form themselves into Health Leagues and render active assistance in providing each home with a latrine and for each hamlet a protected well, and for their area a child welfare centre and funds for relief work. The items are taken up in sequence.

(iii) Under the guidance of the Sanitary Inspector, the villagers organize themselves into Health Leagues to assist in latrine construction, in the provision of protected wells, in reporting infectious diseases, and in encouraging mothers to make use of the trained Health Unit midwife.

**Private.**—Public-spirited people have rented and furnished buildings for holding weekly clinics. Other people have donated lands, buildings, and furniture for maternity homes; some have provided pumps for wells, and a few have offered Challenge Shields to stimulate Health Education.

**Municipal.**—When the Health Unit includes a self-governing town or village, it is necessary to have an understanding with the local authority. After the details are explained, the local authority learns that it loses no power over its employees but gains considerable help without additional expense. The following arrangement has proved satisfactory. The local authority agrees to—

- (a) entrust all its health work to the Medical Officer of Health of the Health Unit.
- (b) pass the necessary regulations and by-laws to enable the Medical Officer of Health to carry on his work in a satisfactory manner.
- (c) contribute the agreed salary and allowances for the required number of approved Sanitary Inspectors and midwives.

These items do not exhaust by any means the possibilities for gaining the co-operation of the people. *The organization of the people for co-operative assistance is so important that the officer in charge of the Health Unit should consider his plan of work to be unsatisfactory until this is done.*





## CHAPTER III

### PERSONNEL REQUIRED

#### STAFF

**H**EALTH Unit organizations require a permanent staff of trained workers as follows:—Medical Officers of Health, public health nurses, midwives, Sanitary Inspectors, clerks, and peons and labourers. These are full-time workers with recognized qualifications acceptable to and approved by Government. The use of Government staff is advantageous as the officers can be interchanged readily if circumstances require. As in all types of work the quality of accomplishment depends upon the interest and initiative of the staff selected, who are, in turn, stimulated by the Medical Officer of Health in charge.

These workers undertake all the public health activities in the area and hence no other staff is required, but specialists from headquarters may be called on to make special surveys and give advice as to procedure.

To get the best results it is advisable to designate an officer from headquarters to make periodic inspections, and to guide the work in established channels.

For a population of 40,000 the following staff is required:—

- 1 Medical Officer of Health
- 5 Sanitary Inspectors
- 5 Public health nurses
- 10 Midwives
- 1 Clerk
- 1 Peon
- 1 Office labourer

#### QUALIFICATIONS

**A Medical Officer of Health** should have the required medical and public health qualifications. He should be a competent person with field experience and thoroughly interested in his subject. He is the administrative officer of the organization.

His attitude towards the work and the people is one of service. He has to be patient and go out of his way to educate the people. He must not stand on ceremony or unduly consider his dignity as he must surmount difficulties and see that the work is carried out according to the plan and policy decided upon by the department. He should not be easily discouraged as success depends on the interest manifested by him.

**Public health nurses** have Government certificates stating that they have had training for four years as follows:—In general nursing three years, in maternity nursing six months, and in public health nursing six months. In addition to the usual training, she is taught to vaccinate against smallpox, to give hook-worm treatment, and to administer treatment for malaria. She lives in the area assigned to her and travels by rickshaw in small towns and by buggy or light car in rural areas. Marriage is an advantage.

The nurse who has been found to be most suitable is below thirty-five years of age, well educated, self-reliant, strong in health and character, sympathetic but forceful, and possessed of common sense, patience, tact, and initiative. She must be thoroughly interested in her work. Unlike the hospital nurse who lives indoors and deals exclusively with sick people, the public health nurse works in the town,



village, or rural area with all the people. As a consequence she becomes well known; she gains the confidence and co-operation of the mothers, and is welcomed in the homes. In Ceylon she deals with a definite population of 8,000. This number will be altered as the work develops.

**Midwives** are Government trained, certified and registered. They are placed under the immediate supervision of the public health nurse. One midwife is expected to deal with a population of 4,000 within a radius of 3 miles and to do an average of twelve confinements a month. Midwives live in the assigned area and travel on foot. It is desirable that the midwife be married and that the entire family stay with her in the area.

**Sanitary Inspectors** are departmentally trained and awarded certificates of the Royal Sanitary Institute. They are specially trained for their capacity and correct attitude towards the work they receive special instruction in vaccination against smallpox and in mass administration of treatment for malaria and hook-worm diseases. Each Inspector is required to become well known in his assigned area and to gain the co-operation of the people. He deals with a population of 8,000.

The clerk belongs to the Government Clerical Service. He should be good at figures, methodical and accustomed to typing. He must be a willing and interested worker.

## **DUTIES OF PERSONNEL**

### **MEDICAL OFFICER OF HEALTH**

- (1) is in charge of all activities, which he plans and directs;
- (2) supervises and controls the work of the entire personnel;
- (3) establishes cordial relations between the people of the area and Health Unit personnel;
- (4) makes initial health survey and special surveys of the area and prepares programme of work based on findings of survey;
- (5) on assuming charge of an area that has already been surveyed, reviews work on existing reports and visits area and prepares programme based on findings of review;
- (6) prepares advance programmes;
- (7) arranges all health educational work;
- (8) presides at weekly staff conferences;
- (9) prepares and forwards reports (monthly, quarterly and yearly);
- (10) makes diagnosis of communicable diseases in consultation with Medical Officers and private practitioners;
- (11) gives inoculations and prescribes mass treatments and supervises vaccinations;
- (12) keeps accurate records of communicable diseases and makes studies;
- (13) conducts all clinics;
- (14) carries out School Medical Inspections and arranges for treatment of defects;
- (15) carries out medical inspection of estates in his area;
- (16) supervises the work of
  - (a) maternity homes;
  - (b) rural hospitals and dispensaries in charge of apothecaries;
- (17) keeps diaries and ~~more~~ cards (own, Sanitary Inspectors, and Nurses) up to date.

(18) keeps himself acquainted with all parts of his area by frequent personal visits;

(19) is responsible for discipline of his staff.

*Note.*—An important responsibility is to see that Inspectors, nurses, and midwives carry out the work as planned. This is accomplished by making frequent visits to each member of the field staff in every part of the area. In order to make detailed reports on each activity inspected he should—

- (a) take the advance programmes of the staff;
- (b) inspect with the field officer concerned;
- (c) inspect without the field officer concerned;
- (d) write inspection notes in diary indicating points observed.

## **PUBLIC HEALTH NURSE**

(1) gains confidence and co-operation of the people of her assigned area;

(2) deals only with Maternity and Child Welfare work.

*Note.*—As the health programme develops and more nurses become available her duties will include generalized Public Health nursing.

(3) does educational work;

(a) at home visits

- (i) routine as per programme;
- (ii) special, emergency or in accordance with instructions of Medical Officer of Health at clinics;

(b) at clinics;

(c) at schools.

(4) is responsible for attendance at clinics;

*Note.*—Knowing the population of her area she should see that the attendance per month is such that the full number of expectant mothers and children are reached.

(5) supervises midwives' work, including inspection of equipment and home;

(6) takes charge of infant at the end of ten days;

(7) keeps records neatly and up to date;

(8) sends reports to Medical Officer of Health as required;

(9) keeps score cards for midwives;

(10) (a) vaccinates babies against smallpox;

(b) administers hook-worm and malaria treatment to specified cases;

(11) checks registration of births;

(12) examines urine of expectant mothers;

(13) attends weekly staff conferences.

## **MIDWIFE**

(1) gains confidence and co-operation of mothers in her assigned area;

(2) locates expectant mothers and arranges for early medical examination;

(3) collects monthly specimens of urine for examination;

(4) arranges clinic visits;

(5) arranges for confinement; delivers expectant mothers at term if normal;

(6) visits and attends to mother and child daily for 10 days after birth;

(7) assists public health nurse at baby clinics in her area;

(8) keeps records neatly and up to date;



- (9) carries out educational work;
- (10) sees that each birth is promptly registered;
- (11) if labour is abnormal, sees that a doctor is called or that mother is taken to the hospital;
- (12) attends weekly staff conferences.

Each midwife is provided with a signboard to be placed on her house for easy identification. She is also provided with a slate on which she writes where she is working and hangs it outside her door so that she could be found when required. She provides herself with a table with shelf on which are kept only those articles connected with her work.

## **SANITARY INSPECTOR**

- (1) gains the confidence and co-operation of the people of his assigned area;
- (2) carries out survey of assigned area according to Departmental instructions and prepares programme of work for approval of Medical Officer of Health;
- (3) does educational work in his area;
- (4) investigates and isolates cases of communicable disease and quarantines and keeps surveillance over contacts; arranges for inoculation of contacts;
- (5) vaccinates against smallpox;
- (6) gives mass treatment for hook-worm and collects specimens for examination;
- (7) keeps under observation cases of leprosy and tuberculosis and their contacts;
- (8) assists in follow-up of V.D. cases;
- (9) gets latrines constructed;
- (10) inspects latrines, houses, food and food-handling establishments, wells, and other licensed trades; and sees that improvements are carried out;
- (11) supervises scavenging and conservancy;
- (12) reports on building applications and does inspection of new buildings;
- (13) undertakes fly and mosquito control, anti-rat work, and the abatement of nuisances;
- (14) keeps pocket note-book, diary, and office records neatly and up to date;
- (15) sends reports to Medical Officer of Health as required;
- (16) attends weekly staff conferences;
- (17) assists nurses and midwives whenever practicable.

## **CLERK**

- (1) deals with correspondence including all typing;
- (2) receives, tabulates, and files all field records;
- (3) maintains office routine regarding communicable diseases (*see under Epidemiology p. 13*);
- (4) tabulates birth and death statistics monthly;
- (5) compiles the figures for reports (monthly, quarterly, annually);
- (6) keeps maps, charts, and statements up to date;
- (7) has charge of all stores;
- (8) is responsible for cleanliness of office building and premises and is in charge of minor staff;
- (9) attends weekly staff conferences.

## CHAPTER IV

### PROCEDURE

**ORGANIZATION.**—Appendix 1A gives the organization chart.

**Administration.**—The office should be centrally located and easily accessible. (For plan, see Appendix 2.)

**Survey.**—“ Know your area, know your people ” is the slogan of Ceylon Health Unit work. If the staff knows the assigned area, and if the staff and the people know each other, the co-operative work will be understood and more easily accomplished. This information is gained by undertaking a house-to-house survey.

The data secured by the survey should be properly tabulated and utilized as a basis for future comparison. *The survey should be completed and its findings studied before a definite programme is adopted.*

On appointment to a Health Unit already surveyed, the Medical Officer of Health should go round his area for getting to know it and the people, study survey and other reports available, and review the position of the work. On the findings of his review he should prepare a programme of work.

**Education.**—Education should be the basis of modern public health work if permanent results are to be obtained.

Education might be divided into

- (a) *General*: which includes routine newspaper articles, pamphlets, posters, exhibits, lantern and cinema shows, wireless talks, neighbourhood discussions, personal contacts, demonstrations, health weeks, and museum visits.
- (b) *Seasonal*: which refers to particular activities such as hook-worm treatment, vaccination and inoculation campaigns, and to emergencies such as outbreaks of smallpox, plague, or malaria.

As an example of education in respect of a seasonal activity, hook-worm treatment may be mentioned. This is carried out by means of:

- (1) cinema films;
- (2) lantern lectures;
- (3) lecture charts for daylight use;
- (4) demonstrations of worms and eggs under the microscope at the end of a lecture;
- (5) securing the co-operation of the headmen and other influential people, of Health Leagues, and of other local organizations.

Similar educational work for a seasonal activity can be planned for vaccination, anti-Typhoid inoculation, school health work or improvement of food-handling establishments. The Medical Officer of Health should draw up educational programmes in detail for carrying out each activity.

(c) *Special*: which refers to groups

- (1) Health Unit staff are advised to subscribe to books and journals on health subjects, prepare papers for discussion at staff conferences;
- (2) Voluntary workers, viz., Social Service Leagues, Child Welfare Leagues, Health Leagues, are given lectures by Medical Officers of Health;
- (3) School teachers are given courses in school hygiene and educational methods to enable them to co-operate in school health work.



Every member of a Health Unit should consider himself or herself a teacher, taking every opportunity to talk to people regarding health matters. It has been found that instead of allowing people to listen to the lecturer, more interest is created if questions are asked and discussed by the people.

Each unit should endeavour to develop a library of technical and popular health literature.

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## CHAPTER V

### VITAL STATISTICS

**T**HE proper evaluation of health work depends upon the collection of accurate statistical data; in other words, upon accurate book-keeping.

Births and deaths are registered in the forty-six proclaimed towns of the Island by Medical Registrars; and in other areas by laymen. For this reason the registration especially with regard to cause of death is considered more reliable in the forty-six proclaimed towns than in the remainder of the Island. In the case of estates scheduled under the Medical Wants of Labourers Ordinance, the registration can also be considered reliable as most of the deaths occur in Government hospitals and those that occur in estates are seen by the Government Medical Officer prior to death, and are reported by the Superintendent of the estate through the Medical Officer, who checks up the cause of death, for registration by the Provincial or Assistant Provincial Registrar.

Returns of births and deaths at present are forwarded by the local Registrars monthly to the Provincial Registrar or Assistant Provincial Registrar who forwards them to the Registrar-General, Colombo. The Medical Officer of Health has no access to the records.

The official procedure just described is still in force and it has not been possible to change it. It is clearly understood that this is not the best arrangement and definitely prevents the Medical Officer of Health from obtaining prompt and accurate information with regard to occurrences of births and deaths in his area. So long as this procedure is followed, Health Unit statistics will be no more reliable than those collected in districts.

To make the best of an unsatisfactory condition, arrangements have been made to obtain copies of the monthly returns of births and deaths on the payment to the local Registrar of 15 cents per return for births and 25 cents per return for deaths. By this procedure every Medical Officer of Health gets direct from the local Registrars in his area monthly returns of births and deaths. This method does not improve the quality of the returns. It only gives reasonably early access to those which have been collected. Provision has been made by an amendment in 1944 of the Births and Deaths Registration Ordinance, whereby notice of a birth or a still birth is required to be given to the Medical Officer of Health of the area within 24 hours of the occurrence.

Health Unit statistics should be accurate and should be received early as the area is small and the number of workers comparatively large. With the staff available it should be possible for the Medical Officer of Health to know what is happening in the way of sickness and deaths in every part of the area. He should know the causes of death as well as the number of deaths.

If the following arrangement could be introduced it might improve the collection of vital statistics in Health Units:—

- (a) Medical Officer of Health to be made the Registrar for the town in which he lives;
- (b) Each Sanitary Inspector to be made a local Registrar for his area, under the supervision of the Medical Officer of Health.

Till this can be achieved the Sanitary Inspectors should be instructed to check carefully the number of deaths reported and the causes given. Further, the Sanitary Inspectors, public health nurses, midwives, and headmen should report all sickness, deaths, and births which come to their knowledge.





## CHAPTER VI

### EPIDEMIOLOGY

**A** LIST of all doctors, ayurvedic practitioners, and headmen in the area is filed in the Office of the Medical Officer of Health. Special postcards are given to them for the notification of cases.

On receipt of this postcard or of other information that a case of infectious disease has occurred, the Sanitary Inspector

- (1) visits and investigates the case, using the official form;
- (2) isolates it and carries out concurrent disinfection;
- (3) placards the house;
- (4) forwards investigation card to Medical Officer of Health who sees that the proper procedure is followed;
- (5) revisits cases under isolation;
- (6) inspects contacts;
- (7) makes final visit to release patient and does terminal disinfection.

In smallpox, plague, cholera, diphtheria, and typhoid fever the Medical Officer of Health personally makes the necessary investigations. In the event of epidemics of any one of the other diseases, the Medical Officer of Health will personally investigate.

### ANKYLOSTOMIASIS

The control of this disease is a seasonal activity and should be continued until sanitation is well established. By previous examinations of faecal specimens the Medical Officer of Health should know the intensity rate (eggs per c.c.) in his area. If the count is 500 eggs per c.c. or over, hook-worm is a public health problem and the Medical Officer of Health should

- (1) select the area to be reached during the campaign;
- (2) arrange treatment places and times;
- (3) obtain a dispenser from the Divisional Medical Superintendent to assist the Sanitary Inspector, if necessary;
- (4) secure drugs (tetrachlorethylene and oil of chenopodium) from Civil Medical Stores. Use quantities given in dosage table (Appendix 12);
- (5) do necessary specialized educational work;
- (6) collect faecal specimens, in standard  $\frac{1}{2}$ -oz. tins, before treatment to establish the intensity rate—10 per cent. population;
- (7) begin treatments early in the morning before meals are taken;  
*Note.*—A trained dispenser can treat each day 300 people assembled.
- (8) collect faecal specimens, in standard  $\frac{1}{2}$ -oz. tins, two weeks after treatment to establish the value of the treatment—25 per cent. of those treated;
- (9) send returns on specified forms.

### CHOLERA

The Medical Officer of Health

- (1) establishes diagnosis bacteriologically;
- (2) determines source of infection and mode of transmission;
- (3) notifies by telegram the Director of Medical and Sanitary Services, Divisional Medical Superintendent, Government Agent, or Assistant Government Agent, Chairman of local authority, and keeps them informed;
- (4) isolates the patient and arranges for his treatment and nursing;
- (5) has area declared as a diseased locality;

- (6) rounds up all contacts and keeps them under observation in a camp for five days;\*
- (7) vaccinates all the people of the locality;
- (8) does house-to-house inspection to detect cases promptly;
- (9) chlorinates all water supplies and repeats the chlorination twice a week during the outbreak;
- (10) instructs all the people to drink boiled water;
- (11) attends to general cleanliness of the area—the proper disposal of faeces requires careful attention;
- (12) deals with house flies by
  - (a) eliminating breeding places,
  - †(b) insecticides;
- (13) disinfects infected houses;
- (14) isolates patients after recovery till three rectal swabs taken at intervals of not less than 24 hours are negative;
- (15) swabs and examines contacts for carriers. Those who are carriers are isolated till three swabs taken at intervals of not less than 24 hours are negative; others are released at the end of five days.

## DIPHTHERIA

The Medical Officer of Health

- (1) establishes diagnosis bacteriologically;
- (2) determines source of infection;
- (3) notifies the Director of Medical and Sanitary Services and Divisional Medical Superintendent by letter;
- (4) isolates the patient, preferably in an infectious disease hospital, till two cultures from the throat and two from the nose taken at not less than twenty-four-hour intervals are negative;
- (5) makes available diphtheria anti-toxin;
- (6) swabs throats of all contacts and observes them for fourteen days; nose and throat swabs should be taken;
- (7) gets virulence test carried out in the case of carriers and isolates those with virulent bacilli till throat and nose are clear;
- (8) takes release swabs;
- (9) carries out terminal disinfection.

*Note.*—Antitoxin is used as a prophylactic only in the case of contacts who are less than 5 years old. Older children and adults who are contacts are swabbed and observed and antitoxin given as a curative at the appearance of the first sign of the disease. Diphtheria Toxoid can be used to produce active immunity in children if conditions in a community indicate a persistence of the disease. This immunity takes time to appear.

## DYSENTERY

The Medical Officer of Health takes the same action as in the cases of Typhoid fever and Cholera.

Diagnosis is established by

- (a) microscopical examination for amoebae and cysts and culture of negative stools;
- (i) culture of stools in Bacillary dysentery.

Release cultures are considered desirable but are not carried out as a matter of routine.

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\* Expert Committee on International Epidemic Control of W. H. O. consider that the period should be extended to 6 or 7 days.

† Owing to flies having developed resistance to D.D.T., insecticides found effective are Gammexane and Oetoklor or Chlordane.

## **FILARIASIS**

Medical Officer of Health

- (1) locates cases at initial survey;
- (2) determines extent of problem in his area;
- (3) has type of parasite and vector investigated;
- (4) surveys breeding places of vector;
- (5) prepares and carries out control measures against the vector in association with departmental experts;
- (6) secures treatment for those suffering with the disease;
- (7) carries out observation on new-born children by blood examination to determine spread of infection;
- (8) carries out educational work in regard to the disease—its causation, spread and control.

## **LEPROSY**

- (1) Leprosy Survey Officer locates cases and classifies them and advises procedure.
- (2) Cases
  - (a) are observed,
  - (b) receive dispensary treatment,
  - (c) are hospitalized.
- (3) Medical Officer of Health
  - (a) arranges for periodic observations (quarterly) and weekly treatment of cases;
  - (b) has suspected patients sent to nearest hospital for transport to Central Leprosy Office and Clinic in Colombo for diagnosis and necessary action;
  - (c) observes contacts half-yearly;
  - (d) keeps careful record of cases and contacts;
  - (e) sends reports as required by the Medical Superintendent, Leprosy Control.

## **MALARIA**

The Medical Officer of Health in malarial districts should have the following data:—

- (1) Topographical data;
- (2) Meteorological data;
- (3) Malaria morbidity—dispensary and hospital attendances for Malaria;
- (4) Vital Statistics—death rates: general, infant, maternal and malaria;
- (5) Spleen Survey—twice yearly, September and March, i.e., before and after the usual Malaria transmission period;
- (6) Parasite Survey—species prevalence and rates;
- (7) Anopheline Survey:
  - (a) Adults—
    - (i) Species prevalent;
    - (ii) Vector species—catching-rate per man per hour.
  - (b) Larval—
    - (i) Larval rates;
    - (ii) Preferential breeding places of vector species.



- (8) Malarial Control Programme for area prepared in consultation with the Superintendent, Anti-Malaria Campaign:
  - (a) Routine;
  - (b) Epidemic.

If an epidemic threatens or arises, the Departmental experts should be requested to state the measures that should be employed to control it.

## **PARANGI-YAWS**

Medical Officer of Health

- (1) locates cases during initial survey through hospitals, dispensaries, headmen and reports of Sanitary Inspectors;
- (2) keeps look-out for and examines suspected cases;
- (3) maintains record of all cases classified into infectious and non-infectious by villages;
- (4) inspects all cases and their contacts once in 6 months and gives courses of treatment to infectious cases to render them rapidly non-infectious;
- (5) sends annual return of cases to D. M. & S. S.

## **PLAGUE**

When human plague occurs, the Medical Officer of Health

- (1) establishes diagnosis bacteriologically;
- (2) isolates positive cases in infectious diseases hospital;
- (3) notifies by telegram Director of Medical and Sanitary Services, Divisional Medical Superintendent, Government Agent, Assistant Government Agent, and Chairman of local authority and keeps them informed;
- (4) determines source of infection whether within or without the area.  
If without, deals only with patient and direct contacts.  
If within—
- (5) traps along radial lines to determine limits of infected area;
- (6) has area declared as a diseased locality;
- (7) evacuates infected area of people and segregates them in a special camp for five clear days. Offers them and all others inoculation;
- (8) protects staff by inoculation and by use of putties and repellants on hands and legs (grease and/or mustard oil) and D.D.T. impregnation of clothing;
- (9) carries out D.D.T. spraying of buildings;
- (10) continues trapping to determine spread of infection and to reduce rat population;
- (11) when rat population has been reduced, evacuates buildings of goods which are disinfested and returns to owners;
- (12) cleans up buildings, fumigates rat holes, opens up runs, and demolishes insanitary parts of buildings and cleans up the whole area;
- (13) tests buildings with guinea pigs to see if they are safe for reoccupation;
- (14) indicates to owner improvements needed to make buildings rat proof;
- (15) permits buildings to be re-occupied only after indicated improvements are carried out;
- (16) examines dead and trapped rats for a period of six months from date of last infected rat.

Rats should not be scattered from the original focus. To overcome this it is necessary to fumigate from the periphery towards the centre.

In pneumonic cases the usual procedure is not carried out. The case and contacts are promptly isolated. As pneumonic plague is highly dangerous, masks should be worn by all attendants and sulphadiazine used as a prophylactic both for contacts and attendants.

The permanent anti-plague measures are

- (1) periodic rat-flea surveys;
- (2) erection of rat-proof grain stores and boutiques;
- (3) rat-proofing of buildings in commercial areas;
- (4) continuous rat-catching and use of poison baits;
- (5) periodic D.D.T. spraying, fumigation of rat holes, and cleaning up of commercial buildings which are liable to harbour rats.

## **SMALLPOX**

The Medical Officer of Health

- (1) confirms diagnosis and isolates positive cases in infectious diseases hospital;
- (2) determines source of infection;
- (3) notifies by telegram the Director of Medical and Sanitary Services, Divisional Medical Superintendent, Government Agent, Assistant Government Agent, and Chairman of local authority, and keeps them informed;
- (4) if necessary, has area proclaimed as a diseased locality;
- (5) segregates contacts in special camp for fourteen days;
- (6) vaccinates contacts and general population;
- (7) makes house-to-house inspection for detection of cases;
- (8) disinfects infected houses;
- (9) releases patients when all scabs have fallen off.

**Vaccination** is a routine seasonal activity and after the work is well established the number of primary vaccinations should approximate the number of births. An effort should be made to vaccinate and revaccinate as follows:—

- (a) before six months of life,
- (b) on entering school (fifth year),
- (c) on leaving school (twelfth to fourteenth year).

## **TUBERCULOSIS (PULMONARY)**

The Medical Officer of Health

- (1) locates cases during initial survey;
- (2) locates cases notified to him;
- (3) carries out physical examination of suspected cases;
- (4) does laboratory examination of sputum and sends specimens to the Medical Research Institute for culture;
- (5) has X-ray examination of chest done wherever possible;
- (6) makes arrangements through the Superintendent, T.B. Campaign, for admission of cases to one of the T.B. institutions;
- (7) has each case admitted to the local hospital till accommodation is available in a Tuberculosis hospital or isolates in home giving full instructions as to procedure to be followed by the patient to protect the rest of the family;
- (8) has patient on his return from hospital visited twice monthly by the Sanitary Inspector to advise and see that instructions given by the hospital authorities are carried out;

- (9) carries out examination of all home contacts once in 6 months, this examination consisting of physical examination, sputum examination, and initial tuberculin testing with periodic re-tests of negative reactions. X-ray examination should be done wherever possible;

*Note.*—BCG vaccination of Tuberculin Negative cases will be carried out when arrangements are made.

- (10) keeps careful records of all cases and contacts on form Med. 792 and Med. 793 and in the appropriate registers;  
(11) sends quarterly returns to the Superintendent, Tuberculosis Campaign.

## **TYPHOID FEVER**

The Medical Officer of Health—

- (1) establishes diagnosis by  
(a) bacteriological examination of blood, bowel discharges or urine; and  
(b) standard agglutination test.

*Note.*—Agglutination becomes positive generally after the first week but the test done during the first week is useful for comparing it with the result obtained after the first week. If test during first week is negative and that after the first week is weakly positive, say 1 in 50, the rising titre will be strongly indicative of infection.

3.5 cc. of blood are needed for the standard agglutination test and culture can be done with the clot.

Widal is done when sufficient blood cannot be obtained for standard agglutination.

In sending samples of faeces or urine it should be seen that they are fresh and that no antiseptic has been added. They could be sent in a clean tin or bottle.

- (2) isolates patients and hospitalizes if practicable;  
(3) sees to concurrent disinfection of all bowel and urinary discharges and of articles soiled by them;  
(4) inoculates contacts;

*Note.*—Immunization gives marked but not absolute protection. There are instances of Typhoid occurring in immunized persons.

Dosage of ordinary vaccine is 0.5 cc., 1.0 cc., and 1.0 cc. at weekly intervals.

Reimmunization can be carried out using 0.5 cc. subcutaneously or 0.1 cc. intradermally given annually. Good results have been obtained from a single dose even after a period of years.

- (5) determines source of infection and mode of transmission by:  
(a) history of case;  
(b) search for unreported cases and carriers;  
(c) bacteriological methods;  
(d) study of food, water supplies and general sanitary conditions;
- (6) isolates patient till 3 release cultures of urine and faeces specimens taken not less than 24 hours apart are negative. In any case this period of isolation of patient should be not less than one month from the onset of disease;
- (7) disinfects infected house;
- (8) carries out general measures: protection of water supplies, sanitary disposal of refuse and night soil, prevention of fly breeding, prevention of immediate contacts, typhoid carriers and convalescents handling food, general T. A. B. inoculation campaign.



## **VENEREAL DISEASE**

### **Medical Officer of Health**

- (1) assists in developing a Venereal Diseases Clinic at the local hospital or develops one himself at a suitable dispensary in his charge if available;
- (2) keeps special look-out for cases of venereal diseases among mothers and children attending Maternity and Child Welfare Clinics;
- (3) takes specimens for diagnosis and gives treatment to those attending his clinic. If he has no clinic, secures treatment at the local hospital;
- (4) has follow-up of cases attending his clinics carried out through his public health nurses, midwives, and sanitary inspectors; and assists in follow-up of cases attending other clinics referred to him;
- (5) keeps record of cases—those attending his clinic and those notified to him under V. D. Regulations;
- (6) carries out health education in Venereal Diseases.

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## CHAPTER VII

### QUARANTINE

**A**S seaports and airports sometimes come within health unit areas, correct procedure relating to quarantine should be known and carried out. Quarantine comprises all measures adopted for the prevention of communicable diseases entering or leaving a country. Quarantine work is international and is governed by two international conventions to both of which Ceylon is a signatory. The International Sanitary Convention of 21. 6. 1926/44 relates to sea and land routes; and the International Sanitary Convention for Aerial Navigation of 12. 4. 1933 relates to air routes. These conventions have been implemented by the Ceylon Quarantine Regulations published in the *Ceylon Government Gazette* No. 8,029 of January 26, 1934 (revised edition 1938); and by the Ceylon Aircrafts Regulations published in the *Government Gazette* No. 8,583 of March 1, 1940.

The Medical Officer of Health

#### **A—In the case of seacraft**

- (1) visits the vessel without delay;
- (2) meets the ship surgeon if there is one, or the master of the ship, and inquires into health of ship and inspects the following documents:
  - (a) Declaration of Health
  - (b) Bills of Health
  - (c) Deratisation Certificate
  - (d) Log Book, if necessary
  - (e) Declaration of cargo
  - (f) Certificates of immunization of crew and passengers if ship has come from an infected port;
- (3) interrogates the master or ship surgeon or any other person in relation to the documents and to the sanitary circumstances on board;
- (4) examines any case of sickness on board to exclude infection;
- (5) examines crew and passengers, if necessary;
- (6) grants free pratique if ship is healthy;
- (7) if there is a case of one of the quarantinable diseases (plague, cholera, yellow fever, smallpox, typhus) carries out measures appropriate to it as prescribed in the quarantine regulations. These generally are:
  - (a) isolation of case by removal to the infectious diseases hospital;
  - (b) disinfection of infected quarters and of soiled linen;
  - (c) surveillance or observation of contacts;
  - (d) immunization of contacts;
  - (e) carrying out of special measures;
  - (f) granting of restricted pratique;
- (8) in the case of one of the non-quarantinable infectious diseases:
  - (a) isolates case on board if facilities are satisfactory; and if not, lands and despatches to infectious diseases hospital;
  - (b) disinfects infected quarters and soiled linen;
  - (c) grants free pratique.



**B—In the case of aircraft**

- (1) visits aircraft on arrival and generally looks over crew and passengers, if necessary;
- (2) scrutinizes declaration of health produced by pilot;
- (3) inspects log book and makes entry;
- (4) medically inspects passengers and crew in his office and scrutinizes their certificates of immunization and personal declaration of health, and attends to work connected with their surveillance should aircraft have come from infected territory;

N.B.—All passengers arriving from India are placed under surveillance.

- (5) grants pratique;
- (6) if there is a case of infectious disease, carries out appropriate measures as for seacraft;
- (7) disinsectizes aircraft before passengers deplane if it comes from Africa or has touched at African airports, and pays particular attention to yellow fever immunization certificates in case aircraft or passengers come from a yellow fever area.

## CHAPTER VIII

### SANITATION

Water supplies are

- (i) piped
- (ii) wells
- (iii) springs
- (iv) tanks and streams

If piped, attention should be given to—

- (i) quantity—25 gallons per head per day;
- (ii) quality—purity—(see Appendix 11 (b) ).
- (iii) sanitary inspection of source—once a month;
- (iv) sampling at least a monthly bacteriological examination.

If wells, attention should be given to—

- (i) Location—away from any source of pollution either surface or underground,
- (ii) quantity—enough for needs of people served,
- (iii) lining—cement to bottom of well,
- (iv) parapet wall—2½ ft. high,
- (v) apron—5 ft. wide,
- (vi) lead-away drain—10 ft. long,
- (vii) drawing of water—method of choice is pump, after mouth of well has been closed except for an inspection opening. Next is the well sweep in preference to the bucket and pulling, as in the former the bucket is left in the air after use thereby prevented from becoming polluted. Type plans available at head office.

*Notz.*—All water from open wells should be considered polluted and should be boiled before being used for drinking.

If springs, attention should be given to—

- (i) general pollution and need for boiling before use,
- (ii) advisability of protection as for wells.

If tanks or streams, attention should be given to—

- (i) general pollution and need for boiling before use.

Community wells in towns are supplied by the local authority, and in villages or hamlets by the Village Committee. Funds for the latter are provided as grants by the Central Government—provision of pipe water supplies in rural areas is being encouraged by grants and technical assistance. The importance of regular sanitary surveys of sources of water supply is particularly stressed.

### SEWAGE DISPOSAL

“ For every home a latrine ” should be the ultimate aim. The disposal systems to be considered are—

- (i) water carriage,
- (ii) bucket—private,  
public,
- (iii) pit —deep pit,  
outside or lateral pit,  
bored-hole,  
mound,  
trench.

(i) and (ii) will be specially suitable for towns and (iii) for rural areas.

(I) Water carriage can be used only when there is a piped water supply. Sewage can go into the general drainage system or into septic tanks.

(II) Bucket latrines are of two types: private and public. Type plans are available at the Head Office.

Bucket latrines are found in towns where there are labourers available for disposing of the contents by hand carts or lorries. Ultimate disposal is by—

- (a) trenching,
- (b) composting.

Trenching is a system well known to all public health workers.

Composting consists in the conversion of night soil and town refuse into manure. (See Appendix 13.) It is suitable only for communities which have a scavenging and conservancy system.

(III) Pit latrines—

Type plans are available at the Head Office.

Latrine construction programmes should be planned with beginning and ending dates.

One village should be taken up for intensive work and completed or nearly completed before another village is commenced.

A survey should be made and a sketch map prepared of the village, showing dwellings with no latrines, with insanitary latrines, and with sanitary latrines. Progress of work should be indicated on the maps.

Arrangements should be made for the work to be carried out on a co-operative basis through a health league which should be responsible for the construction and distribution of squatting plates under the supervision of the Sanitary Inspector. Squatting plates should be made available in convenient instalments.

Latrines should be located close to houses, within 30 feet of the back door, away from fences, trees or shrubs.

The squatting plate should constitute the entire floor space of the latrine. All urine, faeces, and wash water should find their way into the pit.

The superstructure may be of temporary materials. It should provide sufficient lighting and ventilation and should enable a person to walk in erect.

Types of pit latrines are:

(a) Deep pit latrine

is dug to the deepest depth possible without touching water; at least 15 to 20 feet are aimed at.

(b) Outside or lateral pit latrine has a water seal squatting plate and the superstructure could be of permanent materials as the outside pit can be emptied and used indefinitely. It has been found that outside pits 8 to 10 ft. deep can serve a family of 5 for some 6 to 8 years.

(c) Bored-hole latrine

is bored with borers supplied by Government;  
is 20 feet deep and 16 inches in diameter;  
is suitable only for private families;  
lasts a family of 5 persons for 3 to 5 years;  
is lined with woven bamboo, rattan or empty tar barrels if tendency to caving in occurs.

*Note.*—Bored-hole latrines are no longer being constructed as the villager prefers to dig his own pit which lasts him longer.



(d) Mound latrine—

where the ground water level is high it is advisable to erect a mound 3 or 4 feet high, and on this mound place the squatting plate and erect the superstructure. In these latrines it is necessary to line the pit to prevent caving in and empty tar barrels are suitable for the purpose.

The mound prevents splashing and entry of flood water. Weekly oiling with some waste oil prevents breeding of mosquitoes. It would be preferable to have mound latrines provided with water seal plates where the necessity for oiling will not arise.

(e) Trench latrines—

are used in temporary camps as festival camps;

are 30 ft. long, 5 feet deep, 3 ft. wide on top and 2 ft. wide at the bottom, divided in 12 compartments by temporary material with squatting platform of cement concrete or old railway sleepers cut in two and placed across the trench;

have faecal material regularly covered with tropical chloride of lime and earth in the proportion of 1 of former to 3 of latter.

## REFUSE DISPOSAL

*Urban Areas:* Storage—

- (i) Covered bins for homes and licensed trades to be provided by owners;
- (ii) Large metal bins at important junctions to be provided by local authority.

Type plans are available at Head Office.

Removal—

- (a) Carts—type plans are available at the Head Office.
- (b) Motor lorries.

Disposal—

- (i) filling—each day's refuse should be covered with earth;
- (ii) trenching—between coconut trees;
- (iii) burning—incinerator or dump;
- (iv) composting.

*Note.*—(1) Scavenging work of towns should be well organized to show routes of lorry and area to be done by each labourer.

(2) Morning and afternoon muster should be taken.

*Rural Areas.*—Two manure pits 10 ft. long, 5 ft. deep, and 5 ft. wide, shelving 2 ft. at one end, to be used alternately for refuse, dung, and kitchen waste. Ultimately this material could be used for manurial purposes.

*Bazaar Area (rural).*—Labourers for scavenging are provided by—

- (a) Village Committee,
- (b) voluntary subscriptions.

## FOOD SANITATION

### (1) Slaughter of animals—

- (i) inspection of animal for fitness for slaughter;
- (ii) in the pound, twenty-four hours;
- (iii) identification of animals and carcasses before and after slaughter by brand marks on cattle and special marks on goats and sheep;
- (iv) approval of carcasses by proper stamps after slaughter as fit for human consumption;
- (v) removal of carcase in zinc-lined covered cart;
- (vi) cleanliness of slaughter-house.

### (2) Markets—

- (i) frequent inspection for cleanliness and orderliness;
- (ii) no storing under stalls and in corners;
- (iii) no sleeping in markets by owners or employees;
- (iv) inspection of food for suitability for consumption;
- (v) observance of market regulations.

### (3) Dairies—

- (i) must be licensed;
- (ii) frequent inspection for cleanliness;
- (iii) cleanliness of production—approved construction, equipment, and methods;
- (iv) examination of handlers;
- (v) trade inspection note-book;
- (vi) control of adulteration by regular sampling and analysis;
- (vii) observance of local by-laws.

### (4) Lodging houses, eating houses, tea and coffee boutiques, bakeries and aerated water manufactories—

- (i) must be licensed;
- (ii) frequent inspection for cleanliness and observance of by-laws relating to each trade;
- (iii) maintenance of trade inspection note-book;
- (iv) physical and laboratory examination of food.

## CONTROL OF ANIMALS AND INSECTS

### Cattle—

- (i) properly housed in shed not attached to the dwelling house;
- (ii) floor cemented and drained;
- (iii) proper arrangements made for the storing and removal of dung and waste material;
- (iv) not to be permitted in crowded parts of towns;
- (v) galas (halting places) should be kept clean and properly maintained.

### Dogs—

- (i) ownerless and wandering dogs to be impounded and destroyed by the local authority, if not claimed;
- (ii) records to be kept of dogs destroyed;
- (iii) inoculation against rabies.  
If rabies is suspected—
- (iv) find the dog; if not destroyed, it should be kept under observation by the police for ten days; if it is normal the dog can be released;
- (v) if dog develops rabies it should be destroyed, and the brain sent for examination; the patient should be dealt with in accordance with the diagnosis and history.

## RATS AND FLEAS

### Rats—

- (1) build out rats by not providing habourage for them;
- (2) store grain in rat-proof buildings and bins;
- (3) fumigate rat holes with calcid or cyano-gas and fill them up;
- (4) use rat traps;
- (5) use Rodent poison such as 1080.

### Fleas—

are best eliminated by the use of insecticides of which D.D.T. has been found most effective.

### Flies—

are dealt with by

- (a) elimination of breeding places;
- (b) insecticides.

Owing to flies becoming D.D.T. resistant Gammexane or Octaklor (chlordan) has been found effective.

### Mosquitoes—

The control of mosquitoes can be summed up in the words  
“ residual spraying of D.D.T.”

For the eradication of mosquitoes the residual spraying should be combined with D.D.T. spraying of breeding places which should be combined with elimination drainage and filling when possible.

## HOUSING

### *New Buildings.—*

In Urban Council and Town Council areas and special bazaar areas declared under the Housing Ordinance—

- (a) all new buildings should have a permit from the proper local authority;
- (b) while under construction, buildings should be inspected by the Medical Officer of Health and Sanitary Inspector and deviations from plans corrected as soon as discovered;
- (c) occupation should occur only after obtaining certificate of conformity.

A building application goes first to the local authority, then to the Medical Officer of Health, and then to the Sanitary Inspector, who checks the plans in accordance with the building site and the requirements of the Housing Ordinance.

Medical Officer of Health should deal with the application in all its aspects and make his final recommendation to the Chairman.

Care should be taken to see that temporary buildings are promptly demolished.

### *Existing Buildings.—*

Houses and compounds should be periodically inspected on a systematic plan and defects found should be corrected. Houses found insanitary and unfit for human habitation should be dealt with under the Housing Ordinance.





## CHAPTER IX

### FAIRS AND FESTIVALS

**F**AIRS and festivals occur in health unit areas and the procedure for work in connection with them is as follows:—

The Medical Officer of Health—

- (1) discusses arrangements in advance with the Chairman of the local authority and also the Government Agent or the Assistant Government Agent, who is the proper authority (Fairs and Pilgrimages Ordinance) and informs them of his requirements in consultation with the Divisional Medical Superintendent;
- (2) arranges for the lay out of the camp or for improvements to an already laid out camp and for the issue of sanitary regulations if none exists;
- (3) arranges for provision of necessary accommodation, equipment and staff;
- (4) lay out of camp: provides for setting apart of areas for quarters, shops and boutiques, bathing places for men and women, and animals, slaughtering of cattle, and sale of meat and fish, latrines, disposal of refuse and excreta, hospital, dispensary, and infectious diseases hospital;
- (5) accommodation: provides for staff, an office, a dispensary, and field hospital if necessary;
- (6) equipment: requisitions for necessary furniture, linen, drugs, instruments, hardware, &c., for the hospital and dispensary, as well as implements for sanitary work such as baskets, rakes, brooms, mammoties, buckets and disinfectants including tropical chloride of lime;
- (7) staff: arranges for services of a Supervising Sanitary Inspector, Sanitary Inspectors, and an Apothecary if a Medical Officer is not appointed for medical work from the Divisional Medical Superintendent; and sanitary labourers from the Assistant Government Agent or Government Agent of the area;
- (8) arranges for the D.D.T. spraying of the camp about a week before the commencement of the festival;
- (9) makes arrangements regarding water supply as to safeguarding it against pollution; advises people to boil their drinking water;
- (10) arranges for the construction of the latrines which are of the trench type; supervision of their construction is necessary. A Sanitary Inspector is detailed to see that the work is properly done in conformity with departmental type plan;  

N.B.—There will be a good deal of faecal pollution outside the latrines. This should be regularly collected and disposed of.
- (11) makes out scavenging programme and arranges for the proper storage, collection and disposal of refuse;

N.B.—The area should be divided among a suitable number of Sanitary Inspectors provided with an adequate staff of sanitary labourers who should wear identification arm bands; 3 or 4 days before the commencement of festival the staff should assemble and have the whole place cleaned up; after the termination of the festival the staff should remain and clean up the place and properly dispose of the refuse before leaving. This will take about 3 or 4 days.

(12) inspects and passes cattle and goats for slaughter;

(13) morning and afternoon goes round the camp inspecting muster, scavenging, latrine, conservancy, food shops, back areas of shops and boutiques, meat and fish stalls, slaughter-house, water supply, &c., sees food for sale is kept in glass cases protected from flies;

*N.B.*—After having organized the work and assigned duties to staff the Medical Officer of Health must be constantly on the move inspecting and seeing that all his staff are at their work.

(14) keeps look-out for cases of communicable disease and personally deals with every case or suspected case reported;

*N.B.*—It will be advisable to notify people the desirability of having themselves vaccinated against smallpox and inoculated against typhoid fever before going to the festival.

(15) supervises the medical arrangements if no separate medical officer has been appointed. If one is appointed, the Divisional Medical Superintendent will see to the provision of medical equipment and staff; and arranges for dieting;

*N.B.*—It will be better for the medical work also to be supervised by the Medical Officer of Health so that there will be single control. If this is done, it should be seen that the Medical Officer appointed is junior in service to the Medical Officer of Health.

(16) submits report of the medical and sanitary arrangements, work done, defects in the work, and recommendations for improvement of work. These recommendations should be considered in connection with arrangements for the next festival.



## CHAPTER X

### MATERNITY AND CHILD WELFARE

THIS work which is done by the midwives and the public health nurses consists of—

- (a) home visiting,
- (b) clinic work.

*Note.*—Centres for pre-natal and well baby clinics should be selected at convenient sites throughout the area so that mothers and children should not be required to walk excessive distances.

### HOME VISITS

#### MIDWIFE

- (a) establishes cordial relations with all families;
- (b) finds expectant mothers, makes abdominal examination, and arranges for examination by the Medical Officer of Health;
- (c) takes expectant mothers to the pre-natal clinic;
- (d) gives elementary pre-natal advice regarding diet, exercise, baths, clothing, elimination, and danger signals of pregnancy;
- (e) collects samples of urine as instructed;
- (f) makes arrangements for confinement;
- (g) delivers the expectant mother if normal (abnormal deliveries should be referred to hospitals or private practitioners);
- (h) looks for tears and reports finding to the nurse and in her absence to the M. O. H.;
- (i) makes post partum visits daily for ten days to mother and child and reports any abnormal condition of mother and child;
- (j) gives instruction regarding care of breasts and breast-feeding after birth;
- (k) sees that births are promptly registered.

#### PUBLIC HEALTH NURSE

##### *Pre-natal—*

- (a) becomes acquainted with all the people;
- (b) visits expectant mothers as a routine and in accordance with doctor's instructions;
- (c) makes abdominal examinations and takes pelvic measurements;
- (d) gives pre-natal advice in respect of each month of pregnancy;
- (e) approves or disapproves arrangements made by midwife for confinement;
- (f) observes danger signals of pregnancy;
- (g) checks work of midwife at confinement and during puerperium;

*Note.*—The nurse is expected to pay two visits during the puerperium to every case.

- (h) urges required visits to clinics.

##### *Post-natal—*

- (a) examines mother for tears and reports findings;
- (b) examines child for condition of cord, and possible defects;
- (c) gives instruction regarding breast-feeding, interval between feedings, regularity of feedings, &c.;
- (d) sees that the mother is given an examination at the end of six weeks.

### *General—*

- (a) carries out the instructions of the Medical Officer of Health given at the clinic;
- (b) demonstrates baby care such as bathing, feeding (breast and artificial), clothing, separate cot;
- (c) instructs mothers in general cleanliness, preparation of food, sanitary latrines, wholesome drinking water;
- (d) vaccinates the baby between the third and sixth months.

### *Frequency of visits—*

#### (1) *To infants—*

Two visits during first month;  
One visit every month for next three months;  
One visit every two months thereafter till child passes into pre-school period.

#### (2) *To pre-school children—*

One visit every quarter during second year of life;  
One visit every six months thereafter till child goes to school.

## **CLINICS**

### **PRE-NATAL CLINICS**

(1) The best results are obtained if pre-natal and well baby clinics are held at different times.

(2) The hour for holding clinics should be determined in accordance with the convenience of the people.

### **MIDWIFE**

- (a) presents the expectant mothers for examination by the doctor;
- (b) obtains samples of urine for examination by nurse;
- (c) receives instructions from the Medical Officer of Health regarding each expectant mother;
- (d) assists nurse in weighing babies and in other general clinic work at well baby clinics;
- (e) when nurses are not available, gives group talks.

### **NURSE**

- (a) receives mothers cordially;
- (b) examines urines;
- (c) takes pelvic measurements (at first visit only);
- (d) determines expected date of confinement and makes records on pre-natal card;
- (e) gives group talks to mothers on the hygiene of pregnancy;
- (f) administers hook-worm treatment;
- (g) makes statement concerning the required number that should be in attendance and the number present;

### **DOCTOR**

- (a) gives physical examination, inquires into previous pregnancies and labour, checks expected date of confinement and pelvic measurements;
- (b) determines blood pressure, notes condition of urine, and takes blood for wassermann when indicated;  
*Note.*—All abnormalities and physical ailments needing treatment are referred to the nearest hospital or dispensary in charge of a doctor.
- (c) gives advice regarding diet, elimination, exercise, rest, clothing, care of breasts, and early danger signals of pregnancy;
- (d) instructs nurse in regard to the number of clinic visits to be made by the mother;
- (e) prescribes hook-worm treatment;
- (f) asks if clinic attendance is sufficient in number.

## WELL BABY CLINICS

### NURSE

- (a) determines if clinic attendance is satisfactory (90 per cent.);
- (b) welcomes mothers cordially;
- (c) weighs babies unclothed;
- (d) prepares babies for examination by the doctor;
- (e) goes into details with mothers regarding advice given by doctor;
- (f) gives group talks and demonstrations to mothers on one or more of the following subjects serially:—

technique of nursing, bathing, putting baby to sleep, breast-feeding, artificial feeding, value of fresh air, pure water, dietary essentials and selection of food for infants and older children, general care of the baby, and the prevention of diseases in children;

- (g) attends to minor ailments of children;
- (h) gives cod-liver oil, dried milk, laxatives, ointments, as per direction of doctor;
- (i) vaccinates babies;
- (j) teaches child care to little mothers.

*Note.*—Little mothers' classes are held in a separate room in charge of a voluntary worker. They are taught sewing by the voluntary workers and child care by the nurse.

### DOCTOR

- (a) examines babies;
- (b) notes progress made and gives advice.

## VOLUNTARY ORGANIZATIONS

- (a) indicate the valuable co-operation of the public in the work;
- (b) furnish food and other assistance needed for mothers and children;
- (c) provide buildings in which to hold clinics;

*Note.*—Clinics are held in buildings made available in the area by voluntary organizations and individuals. If no building is available at the beginning, the work is commenced in a school. Clinic centres are not included in the budget. They are always a contribution of the people as a mark of co-operation in the work. When they are donated, necessary furniture should also be given.

- (d) designate a member to assist the nurse at clinics, and attend to the distribution of milk and teaching of sewing to little mothers.





# CHAPTER XI

## SCHOOL HEALTH WORK

### A. *School Health Survey*

is undertaken in January of each year

- (1) to note progress made since last survey;
- (2) to prepare programme for the year as follows:—
  - (a) Medical inspection of school children,
  - (b) Treatment of defects,
  - (c) Sanitation of environment,
  - (d) Control of communicable diseases,
  - (e) Health education.

### B. *Medical Inspection of School Children*

- (a) done routinely three times during school career of each child:  
at entrance, in fourth standard, and seventh standard;
- (b) nurse fills out particulars relating to child and family history  
and weighs and measures child and tests sight and hearing;
- (c) a physical examination (average 5 minutes) is given to each  
child; if defects are found a further examination is given;
- (d) parents are invited to be present;
- (e) class teacher is present and assists.

### C. *Treatment of defects*

- (a) defects are classified;
- (b) parents are notified of defects found;
- (c) minor defects such as non-vaccination, scabies, pediculosis and  
common conditions such as hook-worm and malaria are  
treated in the school;
- (d) other defects are referred to the nearest Government hospital,  
dispensary, or special clinic.

### D. *Sanitation of environment*

- (a) schools are inspected twice a year;
- (b) floors are to be of cement;
- (c) school furniture is to be of pattern approved by Education  
Department;
- (d) sanitary latrines are to be at the rate of one seat for seventy-  
five children, separate for the sexes, with urinals at the  
rate of 10 feet for 100 children or one compartment per  
twenty-five children;
- (e) drinking water: if from a pipe supply, to be through approved  
drinking fountains; if from other source, to be boiled and  
stored in covered container and drawn through a tap;  
individual drinking cups to be used;
- (f) refuse is to be stored in covered bin and suitably disposed of;
- (g) school building, furniture, and surroundings are to be main-  
tained in clean state.

### E. *Control of communicable diseases*

- (a) head teacher or principal is to send to nearest Sani-  
tary Inspector or Medical Officer of Health the names of all  
children sent home on account of suspected signs of in-  
fectious disease and a weekly list of those absent from  
school for over three days on account of illness;

- (b) treatment for hook-worm and malaria, inoculation against typhoid, and vaccination against smallpox are to be given by the Medical Officer of Health;
- (c) exclusion of contacts and readmission of patients to be on instructions of the M. O. H.

#### F. *Health Education*

- (a) Training classes for teachers on health education and granting of certificates after testing in practical application for six months.

- (b) Routine health education procedures for elementary schools—

- (1) daily morning inspection;
- (2) scoring of health habit booklet;
- (3) weighing and measuring;
- (4) proper use of handkerchief;
- (5) proper storage of drinking water;
- (6) use of individual drinking cups;
- (7) midday meal;
- (8) first aid outfit;
- (9) health log book;
- (10) health clubs;
- (11) organized play and games;
- (12) proper disposal of refuse;
- (13) pupil participation in—
  - (i) morning inspection;
  - (ii) maintenance of latrines and urinals;
  - (iii) boiling and storage of drinking water;
  - (iv) preparation and serving of midday meal;
  - (v) cleaning of building, furniture, and surroundings;
  - (vi) disposal of refuse.
- (14) parent-teacher associations;
- (15) parents' day;
- (16) school health demonstrations;
- (17) health museums.

- (c) Health Instruction—

- (1) direct teaching of hygiene, first aid, and home nursing and mothercraft;
- (2) teaching by correlation;
- (3) visual methods: posters, scrap books, health magazines, &c.;
- (4) dramatization;
- (5) essay writing;
- (6) oral methods: songs, debates;
- (7) field visits to village homes, latrines, water supplies, food-handling establishments, mosquito breeding places, fly breeding places, Medical Officer of Health's office, Sanitary Inspector's office, office of local authority, child welfare clinics, dispensaries and hospitals;
- (8) sanitary projects.



## CHAPTER XII

### NUTRITION

**N**UTRITION is a major Public Health problem and high priority should be given in solving it. Ceylon is essentially an agricultural country and four-fifths of its population are peasants, who form its back-bone.

About two-fifths of the peasantry do not obtain sufficient calories in their food and hence they are apathetic and incapable of sustained hard work. The food of the peasant is deficient in calories, in Proteins, specially of animal origin, in Calcium and in Vitamins A and B2 (riboflavin). These deficiencies are mainly responsible for the poor physique and stature of the peasantry. They lower the resistance to infection, like Pneumonia and Tuberculosis, delay the recovery from attacks of Malaria and Hook-worm infestation, and are also responsible for the high maternal and infant mortality rates.

The improvement of the economic condition of the peasant is of pressing importance and is a matter for the co-ordinated action of several departments.

The main function of the Medical Officer of Health is to instil into the minds of the people the essential facts with regard to nutrition and to guide them to use that knowledge in the preparation and improvement of their daily diets. Special attention should be paid to the following vulnerable groups:—

#### *The Expectant and Nursing Mother and Infant*

On the proper nutrition of the expectant and nursing mother depends not only her own health, but also the health and well-being of the next generation. Maternity and Child Welfare work should be carried out extensively and provision should be made through the Central Government and local bodies to provide milk and milk foods, orange juice, codliver oil and vitamin tablets where necessary.

#### *The School Child*

On the medical inspection of school children, special attention should be paid to the nutritional state of the pupils, and clinics organized to treat nutritional defects when detected at the examinations.

A nutritious and well balanced midday meal should be given to all necessitous children free of cost until such time as the economic condition of the people improves. The school meal should be considered complementary.

The Medical Officer of Health should carry out a continuous nutritional programme on the following lines:—

#### (a) at maternity and child welfare clinics

##### (i) Education by

talks

demonstrations.

##### (ii) Provision of milk and milk foods

vitamins and codliver oil to those needing them;

#### (b) at Schools

##### (i) Education by

talks

demonstrations

corrections of nutritional defects.

##### (ii) Provisions of midday meals.

(c) at homes

Education by  
Public Health nurses  
Midwives  
Sanitary inspectors  
Social workers;

(d) during Health Weeks

Education by  
exhibits  
demonstrations  
distribution of literature  
talks;

(e) by conduction of nutritional surveys of school children to assess the state of nutrition and the progress made;

(f) by distribution of educational material showing the essential facts of nutrition, composition of food-stuffs and specimen dietaries to suit all types of people and of all age groups.

## CHAPTER XIII

### LABORATORY SERVICE

**E**ACH Health Unit office has a room for a small laboratory and accessories sufficient for the examination of blood and throat smears, sputum, faeces and urine. Other examinations are carried out at the Medical Research Institute, Colombo. For equipment see Appendix 7 (b).

Outfits for sending samples to the Medical Research Institute are stocked and examinations made available free to private practitioners, if such specimens are sent and results received through the Health Unit.

The chemical examination of milk and water are carried out by the Government Analyst. Bacteriological examination of water is done by the Medical Research Institute. Laboratory work in connection with the investigation and control of malaria is done by the Superintendent, Anti-malaria Campaign. Other entomological work is done partly by the Medical Entomologist and partly by the Research Officer in Entomology at the Medical Research Institute.

Examination of faeces before and after hook-worm treatment is carried out by the Medical Research Institute, Colombo.





## CHAPTER XIV

### SUPERVISION OF DISPENSARIES, RURAL HOSPITALS AND MATERNITY HOMES

THE supervision of dispensaries and rural hospitals, in charge of apothecaries, and maternity homes is carried out by the Medical Officer of Health in the area.

#### SUPERVISION OF DISPENSARIES

The Medical Officer of Health—

- (1) visits dispensaries in his area at least once a month and at other times when he happens to be in their neighbourhood or when specially summoned by the apothecary in charge;
- (2) puts up notice at the dispensary of the dates and times of visits for the information of the public;

*N.B.*—A particular day in the month as far as possible should be set apart so that people could remember it easily.

- (3) remains at dispensary for the specified period of his visit;
- (4) treats patients who desire treatment from him and also those reserved for him by the apothecary;
- (5) examines out-patient register and out-patient tickets to study incidence of disease and methods of treatment;
- (6) discusses with apothecary
  - (a) diagnosis and treatment of diseases dealt with at the dispensary;
  - (b) simple matters of sanitation, communicable diseases control and nutrition which the apothecary will have to deal with at his visits to villages;
- (7) looks into the cleanliness and orderliness of the dispensary and its surroundings;
- (8) sees to adequacy of drugs needed for the dispensary;
- (9) encourages effective treatment of malaria and hook-worm by the apothecary;
- (10) studies the tabulation of cases of malaria treated, by villages and weeks;
- (11) studies the monthly and annual dispensary statistics which should be maintained on the special printed forms and up to date;
- (12) calls for index of files and registers and checks them up;
- (13) sees whether patients are being promptly attended to and inquiries into any complaints made;

*N.B.*—Patients as they arrive should be given numbered discs and should be seen in the order of their arrival as indicated by the number on the discs. More acutely ill cases should have priority, as well as patients who come from very long distances.

The discs should be collected by the dispensary orderly after medicine ordered has been given.

*All treatment and drugs are free.*

- (14) looks into health work done by the apothecary; programme of health talks should be prepared for whole year and hung up at dispensary.

## **SUPERVISION OF RURAL HOSPITALS**

Rural hospitals are attached to central dispensaries. In addition to what has been stated in regard to dispensaries the Medical Officer of Health—

- (1) visits at least once a week;  
*N.B.*—Rural hospitals located in areas where the M. O. H. is resident are visited daily.
- (2) examines new patients and checks up their diagnosis and treatment and looks into the progress of other patients;
- (3) discusses cases with the apothecary as to their diagnosis and treatment;
- (4) studies the hospital statistics—monthly and annual—and sees that they are on proper forms and maintained up to date;
- (5) sees to the cleanliness and orderliness of the hospital and its surroundings;
- (6) inspects the sanitary annexes and sees that they are clean and sanitarily maintained;
- (7) inspects the kitchen and sees to its sanitary condition and to the quality of the food that is being prepared;
- (8) inspects the store rooms and sees that stores are properly arranged on shelves and against each article there is a card showing receipts and issues and that windows are barred and properly secured;
- (9) inspects rooms occupied by the minor staff and sees that they are maintained in a clean state;
- (10) looks into water supply, storage and disposal of refuse, disposal of excreta and drainage;
- (11) notes existence of flies and investigates the cause for their existence if present;
- (12) inquires into adequacy of equipment and sees if they are in good condition;
- (13) inquires into dieting of the patients and sees that requisite dieting records are maintained;
- (14) sees if all personnel are present and that they are clean in their person;
- (15) inspects admission register and sees that it is properly maintained up to date.

## **SUPERVISION OF MATERNITY HOMES**

The Medical Officer of Health—

- (1) visits once a week; if however the home is in the locality where he resides, he visits daily;
- (2) sees to cleanliness and orderliness of the home and its surroundings;
- (3) sees all mothers and infants and checks up their condition;
- (4) sees to cases that need special attention and sends them to the nearest hospital;
- (5) instructs the midwife as to attention to mothers and babies;

- (6) inspects sanitary annexes, kitchen, store-room, rooms occupied by midwife and labourer, water supply, storage of refuse, disposal of refuse, excreta and drainage; notes existence of flies, adequacy of equipment, and matters relating to dieting as in the case of rural hospitals;
  - (7) inspects maternity statement—monthly and annual—and sees they are maintained on proper form and up to date;
  - (8) inspects admission register and register of births and sees that they are properly maintained and up to date. Inquires if all births have been notified to registrar of births and deaths for registration;
  - (9) sees if all personnel are present and that they are clean in their person;
  - (10) holds weekly antenatal clinics;
  - (11) arranges for postnatal examination of mother and child after 6 weeks of confinement, and conducts them.
-





## CHAPTER XV

### MAPS, PROGRAMMES, REPORTS, &c.

#### MAPS

**M**APS are a ready help in keeping all the work of the area clearly in mind and are an aid in giving demonstrations to staff and visitors. Maps should be installed in the central office and kept up to date as follows:—

- (1) Map of the country
- (2) Map of the district
- (3) Map of the area (large scale) showing public institutions
- (4) Map showing location and distribution of staff in the area
- (5) Map showing all activities
- (6) Maps showing special activities—
  - (a) latrine construction
  - (b) communicable diseases—current, and total
  - (c) maternal and infant deaths
  - (d) maternity and child welfare activities and centres
  - (e) school health work
  - (f) other special activities.

It is useful to indicate the activities by means of pins with coloured heads which can be obtained from the Department, or substitutes can be prepared in the office.

If maps are mounted on cloth they last longer. Progress maps should be mounted on linoleum, cork, or on soft wood which will easily admit push pins.

Maps can be obtained from the Survey Department through the Director of Medical and Sanitary Services. Sketch maps can be prepared by the Health Unit officers as required.

#### PROGRAMMES

All Health Unit work is based on programmes prepared in advance. The Medical Officer of Health prepares for his use and for the use of the Divisional Medical Superintendent yearly, quarterly, and weekly advance programmes; and for his staff approves weekly programmes. In sending the quarterly advance programme the Medical Officer of Health states whether or not the activities of the previous quarter have been carried out. All work, except emergency work, is carried out in accordance with these weekly advance programmes.

By means of programmes, the Medical Officer of Health is able to visit and inspect work without upsetting the routine of the staff member concerned.

Special programmes for special or seasonal activities are prepared in advance, e.g., hook-worm treatment, small-pox vaccination, health education, and school health work.

#### DIARIES AND NOTE-BOOKS

Diaries are kept by the Medical Officer of Health and Sanitary Inspector, and note-books by the Sanitary Inspector, public health nurse and midwives. They are available for inspection in accordance with Government regulations.

## REPORTS

Reports of all activities should be made to the Divisional Medical Superintendent.

The reports required of the Medical Officer of Health are—

- (a) monthly—statistical,
- (b) quarterly—statistical and narrative,
- (c) yearly—statistical, narrative, and financial (the fourth quarterly report is included in the yearly report),

*Note.*—Copies of above reports are to be sent to the Government Agent or his Assistant, and Chairman of the local authority.

(d) Special—

- (i) surveys (rats, fleas, mosquitoes, &c.).
- (ii) epidemics,
- (iii) school work,
- (iv) hook-worm treatment,
- (v) smallpox vaccination, to Divisional Medical Superintendent,
- (vi) tuberculosis, venereal diseases, parangi, filariasis and leprosy returns.

The Medical Officer of Health will make his own plans for obtaining reports from his staff.

## WEEKLY STAFF CONFERENCES

Weekly conferences with the Health Unit staff are held every Saturday morning. This is an important duty of the Medical Officer of Health. At these conferences—

- (a) the work of the past week is carefully reviewed;
- (b) work of the coming week planned;
- (c) difficulties experienced are discussed and decisions arrived at;
- (d) papers are read and discussed, and the Medical Officer of Health instructs them on some phase of their work;
- (e) supplies for field use are renewed.

Since work in the Health Unit depends upon the conjoint action of all members of the organization, it is essential that every member of the staff, including midwives and clerks, should attend the conferences to hear the discussions and to be available for questioning. If special conferences regarding any particular phase of the work are necessary, they can be held after the general conferences.

For sustaining the interest of the staff by keeping all members conversant with the general progress and for maintaining a high standard of work, these conferences are essential and their importance is given special emphasis.

## FORMS

It is realized that it would be desirable to include all forms which are needed in the work, but as that is impracticable in this publication sample forms are shown and titles of the rest are listed. (See Appendix 3.) All printed forms in Ceylon are usually  $8\frac{1}{2}$  inches by  $13\frac{1}{2}$  inches, cards being 7 inches by 10 inches in size.

---

## CHAPTER XVI

### BUDGETS

THE cost of the work varies with the scale of pay in operation in a country. The cost should be divided between the Central Government and the Local Authority in accordance with arrangements agreed upon in advance. Activities paid for by the Local Authority are confined to the limits of the area controlled by the Local Authority.

In order to correlate the work and give protection to the officers employed, it is important that the Central Government should contribute towards the work. Very few rural communities in any part of the world are able to support a competent health programme from the village or town finances. In Ceylon, the Urban Councils are asked to contribute the necessary number of Sanitary Inspectors, Public Health nurses and midwives and to continue to pay the cost of scavenging and conservancy. In the case of Sanitary Inspectors and Public Health nurses, the Central Government provides their services to local authorities on favourable financial terms.

All members of the staff whether paid by the Local Authority or Central Government are placed under the supervision of the Medical Officer of Health of the Health Unit.

All Health Unit staff are full-time workers and are paid from the budget. No member of the staff is allowed to receive any gratuity in money or in kind for any health service rendered.

A sample budget which relates to the Paranakuru Korale Health Unit for a population of 56,000 is as hereunder. The whole expenditure is borne by the Central Government in this instance as no areas of local authorities are included. It will be noted that the number of public health nurses is inadequate for the population.

#### *A Statement of Expenditure for the Year 1935*

No.	Description	Salaries Rs. c.		Allowances Rs. c.		Total Rs. c.	Grand Total Rs. c.	
1 ..	Medical Officer of Health..	8,175	0	817	50	8,992 50		
1 ..	Clerk ..	878	0	56	0	934 00		
5 ..	Sanitary Inspectors ..	7,082	0	1,200	0	8,282 00		
1 ..	Public Health nurse ..	940	0	1,244	0	2,184 00		
1 ..	Peon ..	300	0	30	0	330 00		
1 ..	Office Labourer ..	287	82	—		287 82		
9 ..	Midwives ..	4,158	0			4,158 00		
	Total Personal Emoluments ..						..	26,163 32
<i>Other Charges—</i>							Rs. c.	
	Travelling expenses ..					2,640	0	
	Transport of stores ..					36	0	
	Rent of office building ..					390	0	
	Conservancy fees ..					18	0	
	Washing office linen ..					11	40	
	Cost of stationery ..					100	0	
	Cost of stores ..					100	0	
	Total other charges ..							3,295 40
	Grand Total ..							29,463 72

#### *A Sample Budget which relates to the Yatinuwara Health Unit for a Population of 54,693 for the Year 1947 is hereunder*

No.	Description	Salaries Rs. c.		Allowances Rs. c.		Total Rs. c.	Grand Total Rs. c.	
1 ..	Medical Officer of Health ..	6,600	0	1,626	0	8,226 00		
2 ..	Clerks ..	930	0	795	84	1,725 84		
6 ..	Sanitary Inspectors..	11,920	0	2,406	0	14,326 00		
2 ..	Public Health Nurses ..	5,040	40	1,464	0	6,504 40		
1 ..	Peon ..	600	0	684	0	1,284 00		
1 ..	Disinfecting Orderly ..	444	0	554	80	998 80		
11 ..	Midwives ..	7,094	0	8,452	60	15,546 60		
	Total Personal Emoluments ..						..	48,611 64
<i>Other Charges—</i>								
	Travelling expenses ..					1,956	00	
	Transport of stores ..					10	75	
	Rent, office building ..					432	00	
	Laundry charges—Office linen ..					8	40	
	Cost of stationery ..					114	00	
	Cost of stores ..					370	50	
	Total other charges ..							2,891 65
	Grand Total ..							51,503 29





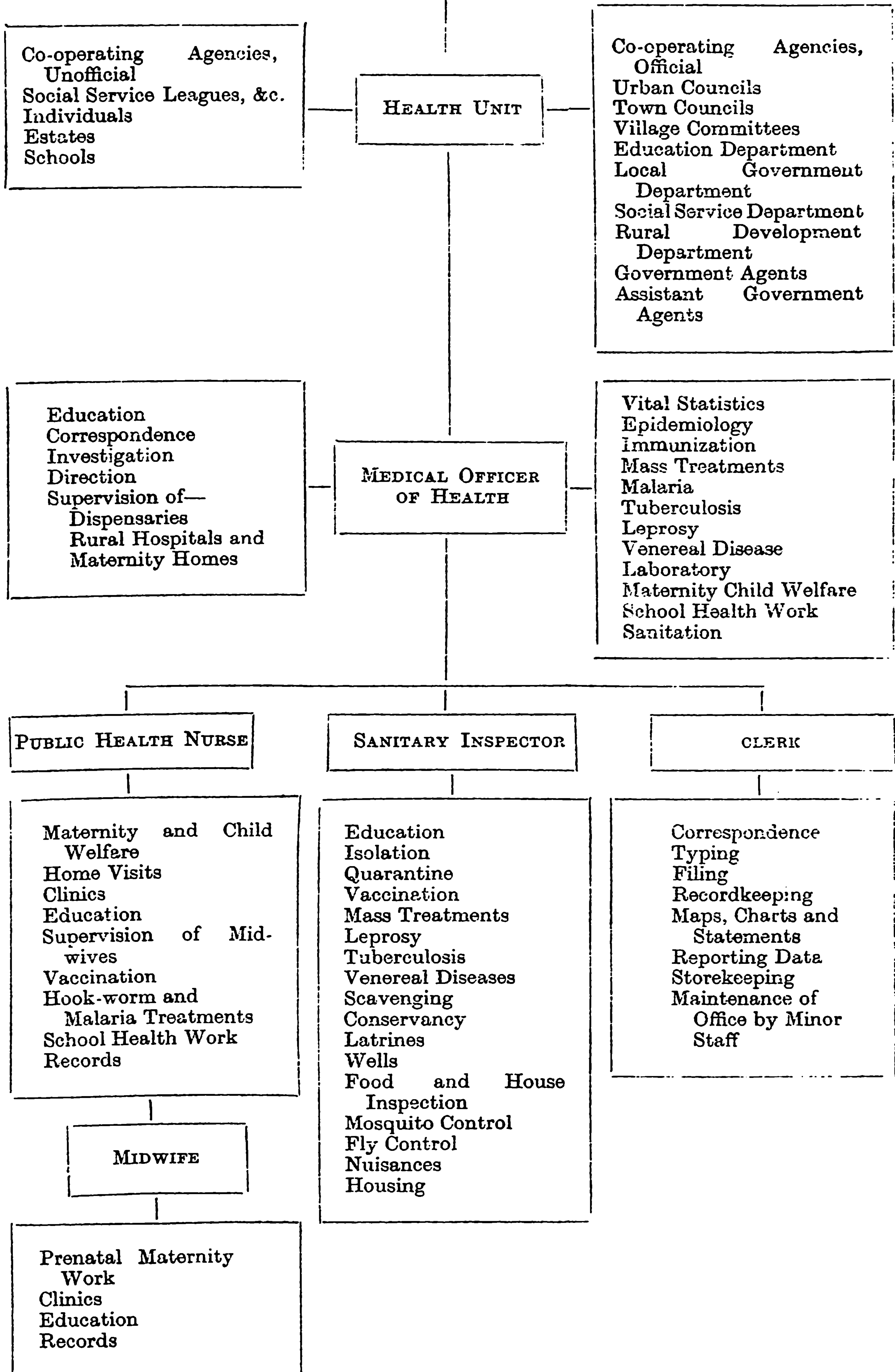
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# APPENDIX 1 (a)

## MINISTRY OF HEALTH AND LOCAL GOVERNMENT

### DEPARTMENT OF MEDICAL AND SANITARY SERVICES



**Medical 435.**

## SURVEY CARD

*Health Unit.*

Serial No.

—, 19

Locality :  
Number and Name of Garden :  
Owner :

Two stories..

### Character of soil and site..

**Construction :** Cabook..Tile..Brick..Cadjan..  
Wattle and Daub..

Condition : Good..Fair..Poor..Unfit for  
Human Habitation

**Light and Ventilation :** Good..Fair..Poor..  
**Windows—Number :**

**Rooms—Number :**

**COMPOUND :** Condition : Plantain trees..Plants..Rubbish

Bin : Yes. No. Covered : Yes.  
No.

Undergrowth : Yes. No. Drains :  
Earth...

Cement. . Kitchen Refuse. . Sub-  
merged during rain : Yes. No.

**Cattle Shed :** Location...Floor—Cement :  
Yes. No.

Drainage—Cement : Yes. No.  
Manure Disposal : How ?

**Stable : Location—Cement floor : Yes. No.**

Drainage—Cement : Yes. No.

## Manure Disposal : How ?

**Figs :** Yes. No. **Pig-sty :** Location.

**Other Animals :**

**Mosquito Breeding Places : Coconut shells. . Pots. . Bottles.**

Pools : Temporary—Permanent.

Wells—Streams. Coconut trenches.

Borrow Pits..Earth drains..

**Flies : Yes. No.**

LATRINES : Type : Flush..Pail..Pit..Deep pit..Bored hole..Water seal..  
Mound..Pig..None..

**Condition :** Flyproof.. Yes.. No... Used.. Occ.: Hab't

Soil Pollution : Yes..No..Maintained : Yes. No.

Disposal of Liquids : Catchpit..Soakage pit, Sealed pit—Surface..  
Nuisance : Yes. No.

**Final Disposal :** Trench..Septic Tank..Subsoil..Water-course.

**WATER SUPPLY :** Source : Piped..Public..Private..Protected : Yes. No.

Reservoir.. Well.. Spring.. Stream.. Rainwater..

Pond..Tank..

**WELLS :** Type : Dug..Driven..Other.    *Depth :* Total                      of water.

Parapet wall..Height—Condition. Covered : Yes. No.

Cement Apron..Condition. Width..Ld-away drain. Yes. No.  
Length.

Inner Surface Lining.. Yes.. No.. Depth.. Watertight : Yes. No.

*How used :* Pump..Well Sweep..Bucket and Rope : Hand..

Pulley. . Common. . Private. .

*Location with respect to Latrines :*

Distance : Ft.                      Elevation..Above..Below..Level..

[illegible]

(Reverse of form Medical 435)  
PERSONAL, SOCIAL, AND MEDICAL HISTORY

Serial No.	Name	Age	Sex	Race	Religion	Occupation	School attending	Length of Residence		Immunization		Hook-worm treatment Year	Malaria		Other Diseases
								House	Locality	Smallpox Year	Typhoid Fever Year		Year	Where acquired	

Notes of action taken.

Sanitary Rating		
	Maximum	Scored
Latrine accommodation	40	
Water supply	25	
House	10	
Cleanliness	10	
Absence of Fly breeding places	8	
Absence of Mosquito breeding places	7	
	100	



# APPENDIX 1 (c)

## SCORE CARD FOR MEDICAL OFFICERS OF HEALTH

Name of M. O. H. : \_\_\_\_\_.

Health District : \_\_\_\_\_.

Year : \_\_\_\_\_.

<i>Items for Scoring</i>	<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>J</i>	<i>J</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>
1. Office—												
Routine* ..												
Promptness* ..												
2. Supervision of Personnel†												
Sanitary Inspectors ..												
P. H. Nurses ..												
Midwives ..												
3. Health Education—												
Lectures : without lan-												
tern ..												
„ with lantern ..												
Cinema Shows ..												
Health Exhibition ..												
Teacher Training Classes												
Conferences with Staff ..												
„ with others												
4. Latrine Construction—												
Total ..												
Per S. I. ..												
5. Wells Constructed—												
Total ..												
Per S. I. ..												
„ Improved—												
Total ..												
Per S. I. ..												
6. Hook-worm Treatments ..												
7. Anti-Smallpox Vaccinations												
8. Anti-Typhoid Inoculations												
Single Dose ..												
Double Dose ..												
9. School Health Work—												
Schools visited ..												
Children examined ..												
Defects corrected ..												
Health Education,												
started in ..												
continuing in												
10. Maternity and Child Wel-												
fare—												
Ante-Natal Clinics held												
Well Baby Clinics held												
11. M. O. H's Conferences												
attended ..												
12. Society Meetings attended												
13. Journals taken : Medical ..												
Public												
Health												
14. Leave Taken ..												

\* State as Good, Fair, or Poor.

† State number whose work was looked into.

# APPENDIX 1 (d)

SCORE CARD OF WORK OF PUBLIC HEALTH NURSES  
 Name of Public Health Nurse : \_\_\_\_\_  
 Station : \_\_\_\_\_ Year : \_\_\_\_\_  
 Medical Officer of Health's area : \_\_\_\_\_

Medical 664  
 (E 2) 3/36.

Items for scoring	J	F	M	A	M	Jn	Jl	A	S	O	N	D
1. Home visiting—												
Homes :												
Visited ..												
No. of visits ..												
Pre-natal cases :												
New ..												
Old ..												
Infants :												
New ..												
Old ..												
Pre-school :												
New ..												
Old ..												
School :												
New ..												
Old ..												
Demonstrations and Talks												
2. Clinics—												
No. held ..												
Attendance :												
Pre-natal ..												
Infant ..												
Pre-school ..												
Demonstrations and Talks..												
Little Mothers' Classes :												
Attendance ..												
Demonstrations and Talks												
3. Supervision of Midwives' work												
Labour cases visited (per- centage) ..												
Midwives' cases checked (per- centage) ..												
4. Investigations—												
Infant deaths ..												
Maternal deaths ..												
5. Urines examined ..												
6. School Health work—												
Schools visited ..												
School clinics ..												
Defects dealt with ..												
Demonstrations and Talks..												
7. Registers, Cards, &c.* ..												
8. General impression of work*..												
9. Punishments ..												

\* Will be scored as G = good, F = fair, P = poor. Entries to be made by the Medical Officer of Health monthly.

# APPENDIX 1 (e)

## SCORE CARD OF WORK OF SCHOOL HEALTH NURSES

Name of School Health Nurse : \_\_\_\_\_.

Station : \_\_\_\_\_.

Year : \_\_\_\_\_.

Medical Officer of Health's area : \_\_\_\_\_.

School Medical Officer's area : \_\_\_\_\_.

<i>Items for Scoring</i>	<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>Jn</i>	<i>Jl</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>
1. Medical inspection—												
No. of schools at which assisted ..												
No. of children examined by M. O. ..												
2. Clinics held—												
Central ..												
School ..												
Defects corrected—												
At central clinics ..												
At school clinics ..												
Delousing ..												
Non-vaccination ..												
Scabies ..												
Uncleanliness ..												
Other defects ..												
3. Health education—												
No. of schools where mother-craft and home nursing classes held ..												
No. of classes ..												
Attendance ..												
No. of schools health education procedures started continuing ..												
4. Control of communicable diseases—												
No. treated for hook-worm for malaria ..												
Anti-typhoid inoculations..												
5. Sanitation—												
No. of minor defects noted corrected ..												
No. of major defects reported to M. O. H. or S. M. O. ..												
6. Home visiting—												
Localities visited ..												
Homes visited ..												
Children visited ..												
Absentees looked up ..												
Demonstrations given ..												
Talks given ..												
Defects corrected as result of visit ..												
7. Records ..												
*Maintenance ..												
*Promptness ..												
8. *General impression of work..												
9. Punishments ..												

\* To be marked as G = Good ; F = Fair ; P = Poor. Entries to be made by the S. M. O. or the M. O. H. under whom the nurse works.

**APPENDIX 1 (f)**  
**SCORE CARD OF WORK OF SANITARY INSPECTORS**

Year : \_\_\_\_\_.

Name of Sanitary Inspector : \_\_\_\_\_ Date of 1st appointment : \_\_\_\_\_.

Date of appointment to present station : \_\_\_\_\_..

Station : \_\_\_\_\_ M. O. H's Area : \_\_\_\_\_.

<i>Items for Scoring</i>	<i>Stand- ard</i>	<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>Jn</i>	<i>Jl</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>
<b>1. Rural Sanitation work—</b>													
(a) No of houses worked ..													
(b) No. of new houses taken up ..													
(c) No. of new houses completed ..													
(d) No. of houses partly completed where the following work is carried out ..													
(i) Compost making ..													
(ii) Kitchen gardens ..													
(iii) Boiled and cooled water ..													
(iv) Ventilation and light ..													
(v) Latrine—													
Newly constructed ..													
Rendered sanitary ..													
(The standard should be 350 houses per year) ..													
<b>2. Wells improved—</b>													
Partially ..													
Radically ..													
<b>3. Premises—</b>													
(1) No. inspected	300												
(2) No. found insanitary ..	p.m.												
(3) No. cleaned up ..													
<b>4. Licensed trade premises—</b>													
Defects found ..													
Defects rectified ..													
Radically improved ..													
<b>5. Typhoid—</b>													
Cases ..													
Visits ..	4 p.c.												
No. hospitalized ..													
Inoculations ..	5 p.c.												
Promptness* ..													
<b>6. Dysentery—</b>													
Cases ..													
Visits ..	3 p.c.												
No. hospitalized ..													
Promptness* ..													
<b>7. (a) Phthisis—</b>													
(1) Cases ..													
(2) Home visits ..	2 p.c.												
(3) No. hospitalized ..	p.m.												
(b) Other infectious diseases—													
(1) Cases ..													
(2) Home visits ..													
<b>8. Hook-worm treatments</b> ..													

\* Date and reference number of letter of D. M. & S. S.



Items for Scoring	Stand- ard	J	F	M	A	M	Jn	Jl	A	S	O	N	D
9 Smallpox vaccinations—													
Primary .. .. .													
Secondary .. .. .													
Percentage of primary vaccina- tion to births of previous year													
10 Anti-plague work—													
Rat holes found .. .. .													
Rat holes filled .. .. .													
Premises radically improved .. .. .													
11 Anti-malaria work—													
(a) Anopheles breeding places .. .. .													
Surveyed .. .. .													
Sampled for larvae .. .. .													
Dealt with permanently .. .. .													
(b) Oiling of rivers—													
(1) No. of days done .. .. .													
(2) No. of sections of rivers oiled .. .. .													
(3) No. of times each section of rivers oiled .. .. .													
(c) Insecticide work—													
(1) No. of houses D. D. T. sprayed .. .. .													
(2) No. of houses pyrethrum sprayed .. .. .													
12 Subsidiary sites—													
(a) No. of subsidiary sites in charge of Sanitary Inspector .. .. .													
(b) Total No. of examinations made—													
(Standard—2 per site per month) .. .. .													
(c) No. of times Anophelene larvae found .. .. .													
(d) Incorrect entries and delays in reports .. .. .													
13 Leprosy work—													
No. of cases existing .. .. .													
Percentage of cases visited .. .. .													
Percentage of cases brought for clinic treatment.. .. .													
14 School health work—													
(i) No. of schools in range .. .. .													
(ii) No. visited .. .. .													
(iii) No. doing health work .. .. .													
(iv) No. taken up for intensive work .. .. .													
(v) No. completed .. .. .													
(vi) No. of inspections for midday meal .. .. .													
15 Health education—													
Talks .. .. .													
School .. .. .	4 p.m.												
Village .. .. .	4 p.m.												
Lantern .. .. .	1 p.m.												
Exhibitions .. .. .													
Estimated attendance .. .. .													
16 Verification of Midwives' deliveries	100%												
17 Office* .. .. .													
18 General impression of work .. .. .													
19 Punishments† .. .. .													
20 Special commendations if any† .. .. .													
21 Leave taken .. .. .													

\* Will be scored as G = Good, F = Fair, P = Poor, p. c. = per case, p. m. = per mensem.  
 Entries to be made by the Medical Officer of Health monthly.  
 † Date and reference number of letter of D. M. & S. S.

# APPENDIX 1 (g)

Medical 663.  
(E 4\* ) 3/46.

## SCORE CARD OF WORK OF MIDWIVES

Name of Midwife : \_\_\_\_\_.

Station : \_\_\_\_\_.

Year : \_\_\_\_\_.

Medical Officer of Health's area : \_\_\_\_\_.

<i>Items for Scoring</i>	<i>Stand- ard</i>	<i>J</i>	<i>F</i>	<i>M</i>	<i>A</i>	<i>M</i>	<i>Jn</i>	<i>Jl</i>	<i>A</i>	<i>S</i>	<i>O</i>	<i>N</i>	<i>D</i>
1. Expectant mothers—													
Registered ..													
Under care ..													
2. Ante-natal visits ..	1 p.c. p.m. under care												
3. Mothers brought to clinics ..	4 per clinic												
4. Urines brought for examination ..	1 p.c. p.m. under care												
5. Births—													
Deliveries by mid- wife ..	12 p.m												
Post partum visits .	10 per case												
6. Tears—													
Found ..													
Repaired ..													
7. Mothers hospitalized..	5% of births												
8. Cleanliness of*—													
Bag ..													
Person ..													
Home ..													
9. Records* ..													
10. General impression of work* ..													
11. Punishments ..													

\* Will be scored as G = good ; F = fair ; P = Poor. Entries to be made by the Nurse-in-charge when one is available, otherwise by the Medical Officer of Health. p.c. = per case ; p. m. = per month.

APPENDIX 1 (h)  
MORTALITY AND MORBIDITY FIGURES

Diseases	Year : _____				Year : _____				Year : _____					
	Total area		Town		Total area		Town		1st Qr.	2nd Qr.	3rd Qr.	Month	Month	Month
	Cases	Death Rate	Cases	Death Rate	Cases	Death Rate	Cases	Death Rate						
Chickenpox ..														
Diphtheria ..														
Dysentery ..														
Measles ..														
Mumps ..														
Phthisis ..														
Typhoid fever ..														
Whooping cough ..														
General deaths ..										.				
Infant deaths ..														
Maternal deaths ..														

(This form is prepared on a black board 3 ft. by 4 ft. and kept where it can be readily seen by visitors and others.)





SCHOOL CLINICS													
	Jan.	Feb.	Mar.	April	May	June	July	Aug.	Sept.	Oct.	Nov.	Dec.	Total
Number treated													
"    to date													
DENTAL WORK													
1st Visits													
Sub-visits													
EYE WORK													
1st Visits													
Sub-visits													
JUDICIAL WORK													
Post-mortems, Judicial													
"    Hospital													
Assault reports													
ESTATE WORK													
Labourers calls													
Staff calls													
QUARANTINE WORK													
No. reported ..													
No. defaulted													
MEDICAL CERTIFICATES													
No. for officers													
No. for minor employees													



MATERNITY AND CHILD WELFARE													
	Jan.	Feb.	Mar.	Apr.	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
Ante-natal 1st Visits ..													
"    Sub-Visits ..													
Deliveries ..													
Post-natal Examination													
LABORATORY EXAMINATIONS													
Local													
In Colombo													
No. per patient													
OPERATIONS													
Obstetric													
Other													





QUARANTINE WORK													
	Jan.	Feb.	March	April	May	June	July	Aug.	Sep.	Oct.	Nov.	Dec.	Total
No. reported	..												
No. defaulted	..												
MEDICAL CERTIFICATES													
No. for officers	..												
No. for minor employees	..												
LABORATORY EXAMINATIONS													
*Blood for Malaria	..												
*Blood for Typhoid	..												
Urine for Sugar and Albumen													
ESTATE WORK													
Labourers' calls	..												
Staff calls	..												
EXPENDITURE													
Total	..												
Per patient	..												

\* Examinations will be carried out at the nearest laboratory.



# APPENDIX 1L

## REPORT OF COMMUNICABLE DISEASES

Medical 544.

බෝවෙන රෝග රෙපෝර්තුවයි

தொற்றுநோய்களைப்பற்றிய அறிக்கை.

Reports to be made by Medical Practitioners and Headmen promptly on receiving information.

බෝවෙන රෝගවලින් සහ මුලාශ්‍රයන් විසින් දැනගත් වහාම රෙපෝර්තුවකළ යුතුයි.

சைத்தியருள் தலைமைக்காரரும் சமரசாரும் தெரிந்தவுடனே அறிவித்தல் கொடுக்கவேண்டும்.

Date දින திகதி : \_\_\_\_\_.

Locality පළාත குறிச்சி : \_\_\_\_\_.

Infectious Diseases. බෝවෙන රෝග. தொற்றுநோய்கள்.

Disease රෝගය கேள்ய	Name of Patient රෝගාතුරයාගේ නම கோவாளியின் பெயர்	Age වයස வயது	Sex ලිංගය ஆணை பெண்ணை	Address පදි.මග விலாசம்

Signature  
අත්සන  
கையொப்பம்

(Reverse of post card)

Notifiable Diseases	
Chickenpox පැපොල් பொக்கிளிப்பான்	Plague වහමාරය கொள்ளுச்சை
Cholera කොලරාව பேதி	Pneumonia හිමිලෝනියා රෝගය சுவாசம்
Diphtheria ගලපටලරෝගය கண்டக்கரப்பன்	Rabies පිස්සුබල රෝගය விசர்சாய்க்கடி
Dysentery ලේ අතීකාරය அபித்தாசவு	Smallpox වසර්ගය கைசுரி
Acute Diarrhoea බඩතොට தீவிரக்கழிச்சல்	Tetanus පිටගැස්ම எரிப்பு
Influenza ඉන්ෆ්ලුවික්සාලන් இன்புளுஎன்சாக் காய்ச்சல்	Tuberculosis කෘෂරෝගය கயரோகம்
German Measles Measles සරව්ව சின்னமுத்து	Typhoid Fever උණසත්තිපාතය கொடுப்புக்காய்ச்சல்
Mumps අඩල්පරග கடைவக்கட்டு	Whooping Cough කක්කල්කැස්ස குக்கல்

On H. M. S.

To

The Medical Officer of Health,

APPENDIX 1M  
(Similar cards for all infectious diseases are available)  
Department of Medical and Sanitary Services  
Investigation Card for Pulmonary Tuberculosis

Case No. _____		Month & Year : _____		District : _____	
Name of Patient		Age		Town or Village : _____	
Conjugal Condition		Sex		Address	
Attending Physician		Occupation		Condition of Employment	
		Address			
Birthplace		Length of residence Where taken ill		Religion	
		Previous residences and dates		Where employed ?	
Date of notice of 1st symptoms		of diagnosis		By whom diagnosed ? By whom notified ?	
		of report		Condition of Employment	
Family history of tuberculosis		Other cases in family		of investigation	
		Other cases in house			
No. of persons in household		Adults over 12 years		Names of children attending schools (see overleaf)	
Housing Conditions		Good		Are inmates willing to be examined?	
Separate room for patient		Fair		Clean	
Instructions as to spread of infection given ?		Coughing Spitting Sneezing Kissing		Wet dusting & sweeping	
		Swallowing sputum Soiling hands Handling raw food		Sputum how disposed of	
Sputum examined		Yes		Yes	
		No		No	
Probable origin of infection		Date		Isolation adequate	
		Positive Negative		Yes No	
Remarks :					

Information given by ----- .  
Investigated by ----- .



(Reverse of Tuberculosis investigation card)

Contacts

Name	Sex	Age	Relationship	Where employed	School attending	Dates of Examination			

Home Visits

Date	Instructions and other information	Instructions followed	Remarks

APPENDIX 1 (N)

DEPARTMENT OF MEDICAL AND SANITARY SERVICES

Medical 668 (pink card\*) 3/36.

INVESTIGATION CARD FOR TYPHOID FEVER

Case No. ....	Month and Year.....	District.....	Town or Village .....	
Name of Patient	Age	Race	Religion	Address
Marital Condition	Sex	Occupation	Where employed ?	
Attending Physician	Date of first visit	By whom reported		
Address				
Date of onset	of talking to bed		of investigation	
Length of residence where taken ill	If less than 30 days, previous residence		Visits within 30 preceding days*	
Other suspicious cases in the same house	Yes/No	Among relatives	Yes/No	In the neighbourhood
		Yes/No	Yes/No	Among associates
		Yes/No	Yes/No	Yes/No
History of Typhoid fever, of any bladder symptoms, stomach trouble or diarrhoea among members of household, visitors, associates, servants, &c.				
Flies	{ Abundant Moderate Few	Dung heap Kitchen refuse Rotting vegetation	Water Source { Pipe-borne Public Private Semi-private Soil-pollution : Yes/No	Well Spring Stream
Fly breeding in compound	Yes/No			River Pond Tank
Latrine	{ Present Absent	{ Surface Pail Pit Pig	Used : Yes/No Maintained Yes/No	* Well { in compound in neighbourhood depth Par : Wall Lined Aproned Protected Common or private bucket
Milk Source	{ Own Bought Vendor's Name	Nil	Used : boiled unboiled Kept protected	Yes/No
Number in family :	Adults (over 12)	Children	Number immunized : Adults Children	Has patient had anti-typhoid vaccine ? Yes/No Yes/No
Has family been given instructions regarding spread of infection ?	Isolation of Patient	Home Hospital--	{ Separate room Screened off Date of removal	Disinfection of stools, linen, bedding, dishes, hands of nurses & contacts Disinfectant provided Yes/No Yes/No
				Well chlorinated Yes/No Yes/No

Who nurses patient: ?		Who cooks food: ?		Widal Test	Yes No	Positive Negative	Date
Date placard put on	taken off	Termination	Recovery date Death date		Release dates Cultures	Subsequent cases	
Date of Terminal Disinfection		Source of Infection		Mode of Transmission			
REMARKS:							

Contacts

Name	Age	Sex	Relationship	Occupation	Address	Observed		Inoculation		REMARKS
						From	To	1st dose	2nd dose	

Home Visits

Date	Work done and instructions given	Instructions followed	Remarks

**APPENDIX 1 (0) (1)**  
**MATERNITY AND CHILD WELFARE**  
**MATERNITY RECORD**  
*(For Expectant and Nursing Mothers)*

Medical 469.

Case No. : \_\_\_\_\_ Locality : \_\_\_\_\_  
Date : \_\_\_\_\_ Centre : \_\_\_\_\_  
Name : \_\_\_\_\_ Race : \_\_\_\_\_ Para : \_\_\_\_\_  
Marital condition : \_\_\_\_\_ Age { at present : \_\_\_\_\_ Occupation : \_\_\_\_\_  
at marriage : \_\_\_\_\_  
Husband's name : \_\_\_\_\_ Occupation : \_\_\_\_\_  
Address : \_\_\_\_\_ Family income : \_\_\_\_\_  
Children { living : \_\_\_\_\_ Age at death : \_\_\_\_\_  
dead : \_\_\_\_\_ Cause of death : \_\_\_\_\_  
Previous pregnancies and confinements : Number : \_\_\_\_\_ Nature : \_\_\_\_\_  
Home conditions : good/fair/poor.  
Satisfactory for home confinement { Yes. Willing to enter Hospital { Yes.  
No. No.  
General condition of mother : \_\_\_\_\_ Physical examination : \_\_\_\_\_  
Measurements { Height of fundus : \_\_\_\_\_ Intercristal : \_\_\_\_\_  
Interspinous : \_\_\_\_\_ External conjugate : \_\_\_\_\_  
Condition P. V. : \_\_\_\_\_  
Presentation : \_\_\_\_\_ F. H. S. : \_\_\_\_\_ Urine : \_\_\_\_\_  
Date of last mens. : \_\_\_\_\_ of quickening : \_\_\_\_\_ of { expected : \_\_\_\_\_  
confinement { actual : \_\_\_\_\_  
Date birth registered : \_\_\_\_\_

\_\_\_\_\_  
Public Health Nurse.

[Reverse of form]

**Revisits**

Month	Date	Home Visits	Date	Clinic Visits
I				
II				
III				
IV				
V, &c.				

**History of Confinement**

*(Duration ; P. V. by whom ; Time of Birth ; Placenta ; Sex of Child, &c.)*

Delivered by



APPENDIX 1 (0) (2)  
MATERNITY AND CHILD WELFARE  
INFANT RECORD  
(For Children under One Year of Age)

Medical 458.

Case No. : \_\_\_\_\_ Locality : \_\_\_\_\_  
Date : \_\_\_\_\_ Centre : \_\_\_\_\_  
Name : \_\_\_\_\_ Age : Mths. \_\_\_\_\_ Wks. \_\_\_\_\_ Sex : \_\_\_\_\_  
Race : \_\_\_\_\_ Date of Birth : \_\_\_\_\_ Date of registration : \_\_\_\_\_  
Father's name : \_\_\_\_\_ Occupation : \_\_\_\_\_ Family income : \_\_\_\_\_  
Mother's name : \_\_\_\_\_ Address : \_\_\_\_\_  
Prenatal care : \_\_\_\_\_ Duration : \_\_\_\_\_  
Home condition : good/fair/poor.  
No. of child : \_\_\_\_\_ Other children { Living : \_\_\_\_\_ Age at death : \_\_\_\_\_  
Dead : \_\_\_\_\_ Cause of death : \_\_\_\_\_  
Obstetrical care (by Doctor ; Midwife, Health Unit, other—trained, untrained).  
General condition ; good/fair/poor.  
Vaccinated at \_\_\_\_\_ Months. Feeding : breast/bottle/mixed.

Public Health Nurse.

Revists

Date	Age		Weight		Feeding	Observations and Physical Examination Skin, Teething, Nutrition, Development, Illness, &c.
	Mths.	Wks.	Lb.	Oz.		

APPENDIX 1 (0) (3)  
MATERNITY AND CHILD WELFARE  
PRE-SCHOOL RECORD  
(For Children from 1-5 Years)

Medical 459.

Case No. : \_\_\_\_\_ Locality : \_\_\_\_\_  
Date : \_\_\_\_\_ Centre : \_\_\_\_\_  
Name : \_\_\_\_\_ Age : Yrs. \_\_\_\_\_ Mths. \_\_\_\_\_ Sex : \_\_\_\_\_  
Race : \_\_\_\_\_ Date of birth : \_\_\_\_\_ Date birth registered : \_\_\_\_\_  
No. of child : \_\_\_\_\_ Other children { Living : \_\_\_\_\_ Age at death : \_\_\_\_\_  
Dead : \_\_\_\_\_ Cause of death : \_\_\_\_\_  
Father's name : \_\_\_\_\_ Occupation : \_\_\_\_\_ Family income : \_\_\_\_\_  
Mother's name : \_\_\_\_\_ Address : \_\_\_\_\_  
Home conditions : good/fair/poor.  
First tooth at : \_\_\_\_\_ mths. Walked at : \_\_\_\_\_ mths.  
Talked at : \_\_\_\_\_ mths.  
Vaccinated at : \_\_\_\_\_ mths. Character and number of marks : \_\_\_\_\_  
General Condition : \_\_\_\_\_  
Food (milk, fruits, vegetables) : \_\_\_\_\_  
Date of first visit by Nurse : \_\_\_\_\_

Public Health Nurse.

Revisits

Date	Age		Weight		Feeding	Observations and Physical Examination
	Yrs.	Mths.	Lb.	Oz.		

DEPARTMENT OF MEDICAL AND SANITARY SERVICES—SCHOOL MEDICAL INSPECTION

Name and Admission No. }  
Sex :  
Race :  
Date of Birth :  
School :  
District and Province :  
Private/Government Assisted/Government.  
Occupation :

Town or Village :  
Denomination :  
Name of Parent }  
Address :

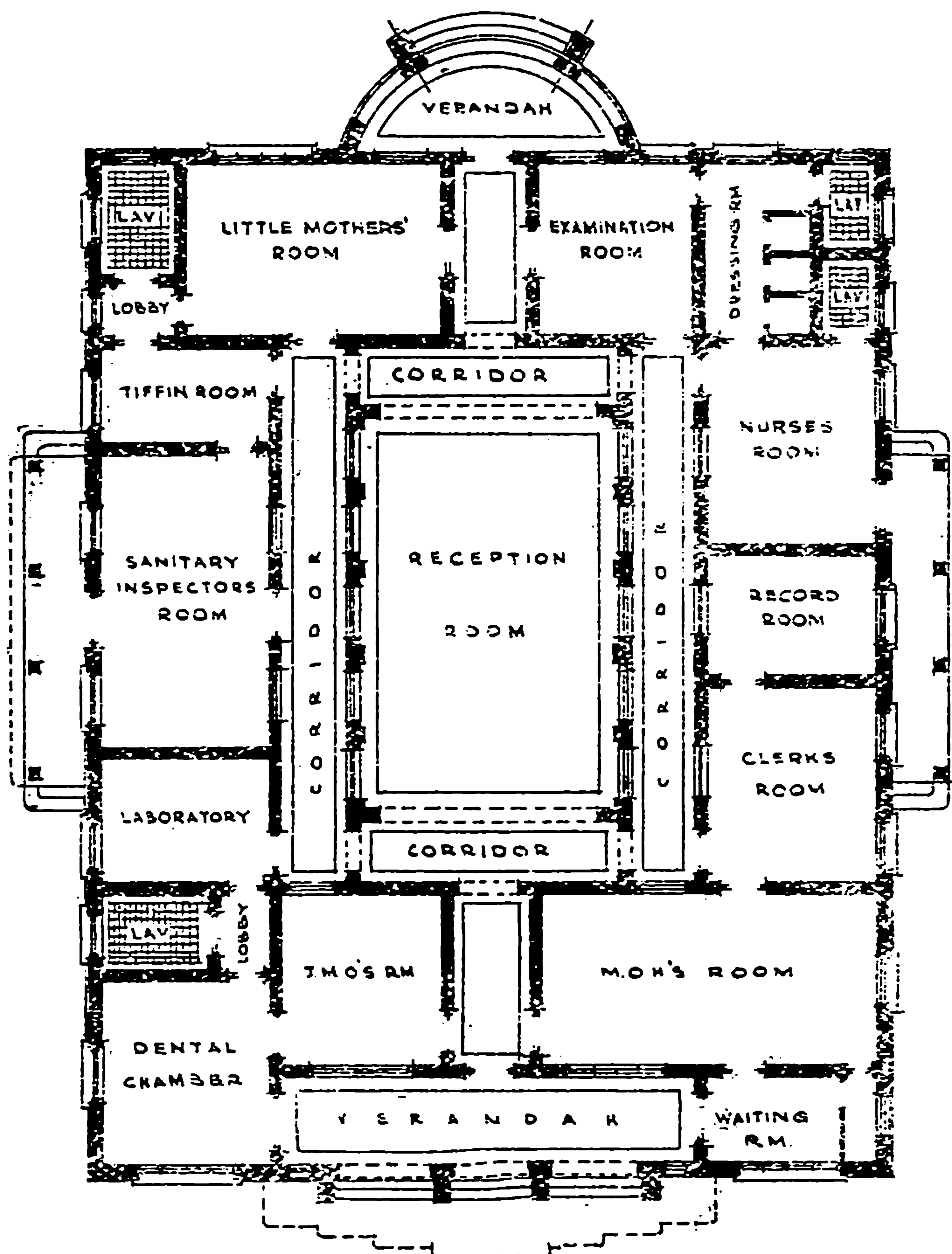
	1st	2nd	3rd	4th	5th
Date of Examination ..					
1 Age ..					
2 Form or Standard ..					
3 Height (in inches) ..					
4 Weight (lb. and oz.) ..					
5 Average weight for height ..					
6 Nutrition ..					
7 Cleanliness ..					
8 Vaccination scar ..					
9 Eyes ..					
10 Ears ..					
11 Vision { Right ..					
Left ..					
12 Hearing { Right ..					
Left ..					
13 Lymph glands ..					
14 Teeth and gums ..					
15 Nose ..					
16 Adenoids ..					
17 Tonsils ..					
18 Anaemia ..					
19 Heart { Organic ..					
Functional ..					
20 Lungs { Right ..					
Left ..					
21 Hernia ..					
22 Orthopaedic defects ..					
23 Nervous System ..					
24 Skin ..					
25 Scalp ..					
26 Hook-worm ..					
27 Malaria (Spleen) ..					
28 Abnormal behaviour ..					
29 Mental deficiency ..					
30 Speech ..					
31 Scabies ..					
32 Pediculosis ..					
33 Ringworm ..					
34 Other defects ..					

O—Normal ; OO—Defects corrected ; X—Defects slight ;  
XX—Defects moderate ; XXX—Defects severe.

[Reverse of card]  
Relief Record

Stan- dard	Defects for Treatment	Date of Notification to Parent or Guardian	Action Taken	Date of Completion of Correction	Remarks

# M.O.H.'S OFFICE & CHILD WELFARE CLINIC AT PANADURA



PLAN

DEPT MEDICAL & SANITARY SERVICES  
SANITARY ENGINEERING DIVISION  
TORRINGTON SQUARE  
COLOMBO - 4 12. 49

## APPENDIX 8

### LIST OF FORMS AND STATEMENTS USED IN HEALTH UNIT WORK

#### *Administration—*

- (1) Organization Chart of Health Unit Work.
- (2) Registers (Appendix 4).
- (3) Weekly Advance Programme—Med. 370.
- (4) Monthly Sanitary Report—Medical 631.
- (5) Outline of Annual Report (Appendix 10).
- (6) Score Cards for—

Medical Officer of Health (roneoed form used—see Appendix I (c) ).  
Sanitary Inspector—Medical 662.  
Public Health Nurse—Medical 664.  
School Health Nurse—roneoed form.  
Midwife—Medical 663.

- (7) Morbidity and Mortality Statistics—Appendix 1 (h).
- (8) Annual Statistics of Health Units.
- (9) Appraisal Form (Appendix 9).
- (10) Minimum List of Maps, Charts and Statements (Appendix 5).
- (11) Office System and List of Files for a M. O. H's Office.
- (12) List of Furniture (Appendix 7a).
- (13) Notice to construct Latrines—Medical 349.
- (14) Notice to abate Nuisance—Medical 320.
- (15) Complaint Form—Medical 357.
- (16) Authority to prosecute—Medical 356.
- (17) Register of prosecutions—Medical 321.
- (18) Muster statement.
- (19) Plan of a Health Unit Office (Appendix 2).

#### *Survey—*

- |  |   |  |
|--|---|--|
| <ol style="list-style-type: none"><li>(1) House Survey</li><li>(2) Estate Survey</li><li>(3) School Survey</li><li>(4) Provisions Stores Survey</li><li>(5) Survey of Dairies</li><li>(6) Survey of Bakeries.</li><li>(7) Survey of Tea boutiques and eating-houses.</li><li>(8) Outline of Health Survey Report (Appendix 8).</li></ol> | } | Roneoed forms obtainable from Head Office. |
|--|---|--|

#### *Statistics—*

- (1) Monthly Returns of Births.
- (2) Monthly Returns of Deaths.
- (3) Tabulation of Births.
- (4) Tabulation of Deaths.
- (5) Tabulation of Infant Deaths.
- (6) Tabulation of Maternal Deaths.
- (7) Hospital Statistics by months, Outdoor—Med. 820.
- (8) Hospital Statistics by months, Indoor—Med. 810.
- (9) Dispensary Statistics by months—Med. 812.
- (10) Maternity Home Statistics by months—Med. 840.
- (11) Hospital Statistics by years—Med. 811.
- (12) Dispensary Statistics, Annual—Med. 813.
- (13) Maternity Home Statistics by years—Med. 839.

#### *Epidemiology—*

- (1) Post Card for Notification of communicable diseases—Med. 544.
- (2) Weekly Out-patient return—Med. 691.
- (3) Monthly report of D. D. T. spraying—Med. 837.
- (4) Monthly statement of Expenditure on D. D. T. spraying—Med. 838.
- (5) Bulletin of infectious diseases notified—Med. 794.
- (6) Weekly and monthly returns of communicable diseases—Med. 580.
- (7) Infectious diseases placard—Med. 475.
- (8) Form for sending specimens for bacteriological examination—Medical 275a.
- (9) Investigation cards for—  
Cholera (roneoed form).  
Diphtheria (roneoed form).



Dysentery—Med. 670.  
 Measles—Med. 669.  
 Plague (roneoed from).  
 Poliomyelitis (roneoed from).  
 Pulmonary T. B.—Med. 667.  
 Smallpox (roneoed form).  
 Trachoma (roneoed form).  
 Typhoid fever—Med. 668  
 Whooping cough—Med. 671.

- (10) Epidemic daily statement (roneoed form).
- (11) Declaration of Diseased Locality—Med. 809.
- (12) Statements of communicable diseases by weeks, months, quarters and years.
- (13) Hook-worm treatment—

- (a) Memorandum on hook-worm treatment.
- (b) Report of egg count—Medical 561.
- (c) Treatment book—Med. Ank. 5.
- (d) Dispenser's weekly report—Med. Ank. 22.
- (e) Score card of Dispensers of Ankylostomiasis Campaign.
- (f) Monthly report of treatments by Dispensers—Med. Ank. 10.
- (g) Monthly return of Anky. treatment in Hospitals and Dispensaries—Med. Ank. 25.

- (14) Yaws—

- (a) Form A—Med. 729.

Form B—(roneoed) Registration of cases.  
 Form C—Summary of cases by villages—roneoed form—Mdf. 145.  
 Contacts—roneoed form—Mdf. 174.  
 Monthly statement—Mdf. 189 (roneoed form).

- (15) Anti-Smallpox Vaccination—

- (a) List of unvaccinated children—Medical 162.
- (b) Programme for vaccination—Med. 64.
- (c) Requisition for calf lymph—Med. 233.
- (d) Returns of calf lymph—Med. 277.
- (e) Monthly return of vaccination—Med. 53.
- (f) Monthly return for estates—Med. 53A.
- (g) Notice to produce children—Med. 161.
- (h) Certificate of successful vaccination—Med. 56.
- (i) Certificate of unfitness for vaccination—Med. 57.
- (j) Score card of Vaccinators—Mdf. 138 (roneoed form).
- (k) Notice to the Superintendent of the estate re Vaccination in the estate—Med. 171.
- (l) Report of Inspection on Vaccination—Med. 153.
- (m) Diary of Vaccination—Med. 60.
- (n) List and Register of Vaccination Defaulters—Med. 33.
- (o) Householder's List for Vaccination—Med. 190.
- (p) Register of Vaccination—Med. 55.

#### *Sanitation—*

- (1) Standards of purity of drinking water—Appendix 11 (b).
- (2) Instructions for the collection of water for chemical and bacteriological examination.
- (3) Form of sending water samples—Medical 346.
- (4) Application form for examination of a sample of milk—Medical 361.
- (5) Licensed trades inspection book.
- (6) Latrine register.
- (7) Instructions for composting.
- (8) Monthly return of latrines constructed by inspectors.
- (9) Charts, statements and maps in connection with latrine construction.
- (10) Type plans of private bucket latrines, bored hole latrines, deep pit latrines, public latrines, mould for cement-concrete squatting plates, refuse cart, conservancy hand-cart, market, dairy, bakery, wells, incinerators, grain store, rice bin.

### *Maternity and Child Welfare—*

- (1) Prenatal card—Medical 460.
- (2) Infant card—Medical 458.
- (3) Pre-school card—Medical 459.
- (4) Continuation card—Medical 461.
- (5) Weight charts for infants—Medical 637.
- (6) Patients referred to hospital—Medical 583.
- (7) Clinic Registers—

Pre-natal—Medical 645.  
Infants—Medical 646.  
Pre-school—Medical 647.  
Summary—Medical 648.

#### (8) Home visits—

Midwife's register of expectant mothers under care—Medical 644.  
Nurse's Register—

Prenatal—Medical 649.  
Infants—Medical 650.  
Pre-school—Medical 651.

- (9) Midwife's monthly statement of confinements conducted and postpartum visits made—Medical 666.
- (10) Midwife's monthly summary of work done—Med. 665.
- (11) Public health nurse's monthly summary of work done at Clinics—Med. 675.
- (12) Public health nurse's monthly summary of home visits—Medical 676.
- (13) Milk register.
- (14) Minor ailments register.
- (15) Investigation card for maternal deaths—Med. 677.
- (16) Investigation card for infant deaths—Medical 678.
- (17) Investigation card for still births—Medical 844.
- (18) Plan of a health centre.
- (19) Furniture needed for a health centre (Appendix 7 (b)).
- (20) Postnatal record (revised).
- (21) Monthly Report of Woman Medical Officer.
- (22) Return of work in maternity homes—Medical 830.

### *School Health Work—*

- (1) Survey of Schools.
- (2) Tabulation of School health survey.
- (3) School health statistics.
- (4) Report on school buildings.
- (5) Advance programme form—Medical 672.
- (6) Individual health record—Medical 457.
- (7) Classification of defects—Medical 456.
- (8) Report on Medical inspection—Medical 410.
- (9) Medical recommendation to parents—Medical 609.
- (10) Reference for treatment—Medical 606.
- (11) Post card for notification of infectious disease and children absent from school for over three days on account of illness—Medical 628.
- (12) Return of work done, Form No. 1—Medical 673.
- (13) Return of work done, Form No. 2—Medical 674.
- (14) Instructions to officers carrying out School health work (Appendix 14).
- (15) Instructions for guidance of School health nurse (Appendix 15).
- (16) Monthly report of school health nurse.
- (17) Tabulation of school health nurse's work.
- (18) Statement of school health work—Medical 797.
- (19) Health habit training booklet.
- (20) Syllabus on health education for teachers' training schools.
- (21) Syllabus on health education for teachers in service.

### *Health Education—*

- (1) Health education register.

## APPENDIX 4

### STANDARD LIST OF REGISTERS

1. Consumable Stores Register (Medical 287).
2. Inventory Book (Medical 311).
3. Register of Instruments.
4. Register of Biological Products.
5. Register of Anti-Typhoid Inoculations.
6. Building Application Register.
7. Register of Temporary Buildings.
8. Infectious Disease Register.
9. Tuberculosis Register.
10. Laboratory Register.
11. Health Education Register.
12. Milk Analysis Register.
13. Register of Establishment Expenditure.
14. Register of Consultation in the Office.
15. Register of Leave.
16. Visitors' Book.

1. *The Consumable Stores Register* is a printed form bearing Medical 287 and has the following columns with a page for each article :—

*Article :*

Oil of Chenopodium.

<i>Receipt</i>			<i>Issues</i>			
<i>Date</i>	<i>From</i>	<i>Quantity</i>	<i>Date</i>	<i>To</i>	<i>Quantity</i>	<i>Balance</i>

2. *The Inventory Book* is also a printed register bearing Medical 311.

3. *The Register of Instruments* is maintained on the same form as Medical 311.

4. *The Register of Biological Products* is divided into two parts ; one for anti-typhoid vaccine and the other for calf-lymph. When other products are obtained, separate records should be maintained. The columns for anti-typhoid vaccine could be the same as for the Consumable Stores Register.

The columns for calf-lymph should be as follows :—

<i>Date of Requisition</i>	<i>No. of Requisition</i>	<i>No. proposed to be vaccinated</i>	<i>No. of tubes indented</i>	<i>No. received</i>	<i>Invoice No. of Lymph</i>	<i>No. issued</i>	<i>To S. I. I.</i>	<i>Number vaccinated</i>	<i>Balance in hand</i>	<i>Balance how dealt with</i>	<i>Reference No. of letter</i>	<i>Remarks</i>

5. *The Register of Anti-Typhoid Inoculations* has the following columns :—

<i>Serial No.</i>	<i>Date</i>	<i>Name</i>	<i>Age</i>	<i>Sex</i>	<i>Race</i>	<i>Contact of Case No.</i>	<i>Date</i>		<i>Remarks</i>
							<i>1st dose</i>	<i>2nd dose</i>	

6. The Building Application Register has the following columns :—

Serial No.	Date of receipt	Name of applicant	Address	Location of site	Use of building	Erection or alteration	Date of return	Recommendations	Health Unit reference	U. D. C. reference	Date of permit	Date of C. of C.	Remarks

7. The Register of Temporary Buildings has the following columns :—

Serial No.	Name of applicant	Address	Locality	Nature of building	Duration	Date of expiry	Permit No.	Date of demolition	Remarks

8. The Register of Infectious Diseases has the following columns :—

Serial No.	Card No.	Disease	Locality	Name of patient	Age	Sex	Race	Occupation	Notified by	Dates of			Total visits	Termination		Date	Isolation	
										Onset	Report- ing	1st visit		Death	Recon- ery		House	Hos- pital

9. The Tuberculosis Register has the following columns :—

A. For patients.

Serial No.	No. of Investi- gation card	Date	Name of patient	Age	Sex	Race	Address	No. of contacts	Date of Visits							Termination date	Terminal disinfection date

B. For contacts.

Serial No.	Case No.	Name of contacts	Age	Sex	Race	Address	Dates of Examination							Results



10. The Laboratory Register has the following columns :—

Serial No.	Nature of specimen	Examined		Examined		Date specimen sent to Colombo	Date result received	Result of Exam.	Name of patient	Address	Age	Sex	Race	Remarks
		For	By	Locally	In Colombo									

11. The Health Education Register has the following columns :—

**A. Lectures.**

Date	Locality	Time	Subject	Delivered by	Type	Estimated attendance	Remarks

**B. Conferences.**

Date	Locality	Time	Group or organization	Subject	Estimated attendance	Remarks

12. The Milk Analysis Register has the following columns :—

Serial No.	No. and date of Govt. Analyst	Name of S. I. and Locality	Name of vendor and address	Date sample was taken	% of adulteration	Action recommended	Date sent to S. I.	Result of prosecution	Defects in milk

13. The Register of Establishment Expenditure has the following columns :—

Names of officers	Designation	Date of appointment	Salary	Date of next increment	Jan.		Feb.		March		1st Qr.	
					Rs.	c.	Rs.	c.	Rs.	c.	Rs.	c.

Separate leaves of the register should be used—

- for salary,
- for personal allowances,
- for fixed allowances (rent, diet, washing),
- for other charges (office rent, transport, stores, equipment, incidental).

14. The Register of Consultation in the Office has the following columns :—

Serial No.	Date	Name	Age	Sex	Race	Address	Com-plaint	Result of exami-nation	Advice given	Remarks

15. The Register of Leave has the following columns :—

Serial No.	Leave taken		Type of leave			Acting Officer	Address while on leave	Reasons for leave	Warrants supplied	Remarks
	From	To	Casual	Lieu	Vaca-tion					

16. The Register of Visitors' Book has the following columns :—

Name	Designation	Address	Remarks

## APPENDIX 5

### LIST OF MAPS, CHARTS, AND STATEMENTS

#### (1) *Administration*—

- (a) Health districts map of Ceylon showing by cross hatching the units already in operation.
- (b) Map of activities.
- (c) Map showing location of Sanitary Inspectors, Public Health Nurses, Midwives, Health Centres, Hospitals, and Dispensaries.
- (d) Organization Chart.
- (e) Chart of duties of personnel.
- (f) Public health statistics of area.
- (g) Yearly rates (total, urban, and rural) for births, deaths, infant deaths, maternal deaths, stillbirths (urban).

#### (2) *Communicable diseases*—

- (a) Spot map of total cases.
- (b) Spot map of current cases.
- (c) Chart of incidence of the different diseases by months and by years side by side for each disease for a series of years.
- (d) Cumulative charts by months for typhoid fever and dysentery.
- (e) Cumulative chart of hook-worm treatment by months and a chart by years.
- (f) Charts showing by months and years cases of malaria treated at hospitals and dispensaries in the area in relation to total cases treated.
- (g) Statement of incidence by weeks, months, quarters, and years.

*Note.*—After five years, monthly norms to be worked out for each disease for the area.

#### (3) *Latrine Construction*—

- (a) Map showing progress of latrine construction by coloured flags indicating houses sanitated as follows :—

25 per cent.	Red
50 per cent.	Pink
75 per cent.	Green
100 per cent.	Blue

- (b) Representation on cross-section paper progress made in villages according to Vidane Arachchi's or equivalent areas. The village to be represented by a square and percentage of latrines kept up to date quarterly.
- (c) Chart showing latrines constructed by months side by side for a series of years.
- (d) Cumulative chart by years to indicate the relation of latrines to existing houses.
- (e) Statement showing progress by villages.

#### (4) *For Maternity and Child Welfare*—

- (a) Spot map showing location of maternal and infant deaths.
- (b) Chart showing by months and years total births and births delivered by Health Unit midwives.
- (c) Chart showing by months the deliveries of each midwife in relation to the births registered in her area.
- (d) Charts of maternal and infant mortalities by years.
- (e) Chart showing attendance at clinics by years—

Number of centres  
Number of clinics  
Number attending  
Average attendance.

- (f) Chart showing attendance at each clinic by months.
- (g) Chart showing home visits by months by public health nurses.
- (h) Chart showing by years—

- (i) the relation of mothers receiving prenatal care to total births.
- (ii) the relation of the new infants under care to the births.

#### (5) *For School Health Work*—

- (a) Map showing location of the schools in the area by means of coloured paper symbols pasted on the map as follows :—

Boys' school	circle
Girls' school	square
Mixed school	triangle

The various denominations will be indicated by different colours of the above symbol—

Buddhist	yellow
Christian	blue
Government	pink
Hindu	red
Muslim	green

Facts relating to each school will be indicated around the symbol by means of coloured pins, *e.g.* :—

School medically inspected	turquoise
With protected water supplies	blue
Adequate latrine accommodation	pink
Practising health habits	green
School clinics	yellow
&c.	

(b) Cumulative charts showing—

- (i) The school population and the number of children examined monthly and during each year.
- (ii) The number of defects—
  - (a) found,
  - (b) corrected monthly and yearly.

(6) *For Estate Health Work—*

The estates in the area having resident labour will be indicated by circular paper discs pasted just over the name of the estate on the map. Those that are co-operating will have discs coloured blue. Around the discs will be placed coloured pins to indicate the different types of health work done in them, *e.g.* :—

Hook-worm treatment	canary
Vaccination	green
Maternity work	turquoise
Health education	pink
Communicable disease work	red
Sanitation	orange
Home visiting by nurses	blue

(7) *For Health Education—*

(a) A spot map showing the different types of educational work done indicated by coloured pins :—

Lectures with lantern	orange
Lectures without lantern	yellow
Lectures with cinema	blue
Talks, village	pink
Talks, school	green
Health exhibition	turquoise

(b) Charts showing by years the talks and lectures of the different types given.

(8) *Statement of Morbidity and Mortality—*

This is to be indicated on the blackboard according to form already given (appendix 1 D).

(9) *Other Activities—*

- (a) Rat flea survey,
- (b) Anopheline survey,
- (c) Spleen survey, &c.

(10) *Programmes and Duty Reports—*

In addition to the above it should be seen that the Medical Officer of Health has on his table when he first visits the office in the morning—

(a) A statement showing the programme of work for each member of the unit for the day on one sheet of paper under the following heads :—

<i>Name of Officer</i>	<i>A. M.</i>	<i>P. M.</i>

- (b) A statement relating to the scavenging and conservancy staff for the day.
- (c) The list of new cases of communicable diseases reported.



## APPENDIX 6

### OFFICE SYSTEM AND LIST OF FILES FOR THE OFFICE OF A MEDICAL OFFICER OF HEALTH

*N.B.*—Wherever reference is made to a Medical Officer of Health, the suggestions are equally applicable to a Divisional Medical Officer of Health.

1. *Daily Tappal.*—The Medical Officer of Health will open the tappal or in his absence his assistant or any other responsible officer deputed by him. On opening the tappal the Medical Officer of Health will give directions where necessary and send the papers to the clerk. The papers will be stamped with a date stamp at the same time and punched.

2. *Sorting of Letters.*—The clerk should go through all the papers and sort them into :—

- (1) Urgent Papers,
- (2) Important Papers,
- (3) Ordinary routine papers such as reports, returns, &c.

Each kind of report or return will be placed in its respective tray or folder.

3. *Case Registration.*—A “Case” can begin in either of two ways, by an inward or an outward letter on a new subject. This letter should be registered and given the number next to that of the last case registered in the case register.

A case is a collection of papers arising from a single original letter, the subsequent correspondence of which bears the same number. All the pages of a case should be numbered serially in book form—the latest pages being at the bottom of the case. Annexes to letters should be numbered thus :—1a, 1b; 2a, 2b, 2c; &c. This will enable easy reference to papers—the numbers of the pages being quoted instead of letters being flagged or their numbers and dates being referred to.

A case should not be overburdened with unnecessary papers. All rough drafts should be destroyed after the typed or perfected copies are signed. Office copies of Memos inviting attention or of acknowledgements should not be kept—a note to the effect such action has been taken need only to be made in the case. No loose papers should be kept in a case, except the letter submitted to the Medical Officer of Health for orders or for signature. All papers should normally be punched and placed correctly in chronological and serial order in the file.

4. *Heading.*—In entering column 6 of the case register the clerk should see that the heading is sufficiently clear to enable him to find out the case in the register if its subject only is known. This subject heading must always be shown on all outward letters particularly those inviting attention.

5. *Location of Cases.*—One of four things may happen to a case :—

- (1) It may be in the cabinet of the clerk awaiting further action. This is called a *Pending Case* ;
- or (2) It may be in one of the office trays on the clerk's table and meant to be dealt with within 3 days. This is called an *Action Case* ;
- or (3) It may be sent out of the office, in which case the card indicator bearing its number will denote to whom it has been sent. The card indicator will then be in the card index stand maintained for such indication ;
- or (4) It may be filed in the Record Room. This is called a *Closed Case*.

6. *Pending Case.*—Pending Cases should be placed in a cabinet or drawer with a card indicator bearing its case number affixed to the limp folder by a clip. The pending cases should be arranged in numerical order with their indicators visible to the eye. All such cases should be placed in the cabinet only after such case numbers have been noted in the diary of the clerk on different dates for attention and these dates (usually termed “Call-up” dates) have been noted in the office copies of the letter in the file.

7. *Action Case.*—If an action case is on a clerk's table he should either be dealing with it, or it should be in a tray awaiting attention by him or the Medical Officer of Health. When an action case is submitted to the Medical Officer of Health the indicator should be removed and kept in the card index stand inserting in pencil the date on which the case has been submitted to the Medical Officer of Health. If this is not returned within 3 days the clerk should remind the Medical Officer of Health about it.

8. *Endorsement Cards.*—If a case is sent out of the office the clerk, in addition to noting its whereabouts, should put a “call-up” date on the indicator and note the case number in his diary for this date. The procedure should also be followed when all the papers of a case are sent out with an endorsement from the office.

9. *Closed Cases.*—When a case is closed (i.e., when there is nothing more to be done about it) it should be filed in its appropriate file. The letter F should be marked in the case register opposite the Registration number of the case together with the number of the file in which the case is being filed. Papers should be affixed to



file by laces passed through four holes punched at equal distances down the left hand side of each case, the laces being tied in a loop at the back of the file. Cases should be filed one after the other, interleaved with cartridge paper cut to the size of a half sheet so as to separate one case from the other. As cases are filed their numbers should be noted on the inner side of the front file cover.

One-hole covers should be used for temporary files the papers of which are destroyed at specified periods.

A numerical list of files as well as an alphabetical list should be maintained in every office.

10. *Acknowledgements*.—Every letter from the public to which a reply is not going within the next three days must be acknowledged. For acknowledgement, a post card or a form franked with signature of the Medical Officer of Health should be posted without registration, a note of the date and the fact of acknowledgement being noted in the case.

11. *Alphabetical Index Register*.—It is not necessary to index all cases by subject. Cases that will be useful for future reference or contain important rulings or decisions on general questions should be indexed carefully and without any omission. In such instances case numbers and file numbers should be given. The initial step in the making of an index is the selection of the essential subject-matter and the selection of the words (headings) under which it shall be presented for future reference.

12. *Reference File*.—In every office of a Medical Officer of Health the clerk should keep a ready-reference file which is called the “Reference File”.

This file should contain :

(1) List of duties with guides to action taken under each subject.

(2) Vital Statistics—

(a) Population of the area by villages according to census.

(b) Population of villages by Sanitary Inspectors' areas.

(c) Population of villages by Public Health Nurses' areas.

(d) Population of villages by Midwives' areas.

(3) Return—

(a) Returns due from the Office of the Medical Officer of Health with due dates.

(b) Returns due to the Office of the Medical Officer of Health with due dates.

(4) List of standard files.

(5) List of important circulars (number of the circular, subject and date should be given).

(6) Monthly statement of work done—tabulation from monthly report to gather figures for quarterly and annual reports.

(7) Instructions for the guidance of Sanitary Inspectors.

(8) Regulations for Stores accounting.

(9) Price List of drugs and stationery.

(10) List of documents exempted from registration.

(11) List of documents to be preserved.

(12) Outline of quarterly report.

(13) Outline of annual report for Health Units.

(14) Outline of School Medical Examination.

(15) Ordinances and by-laws together—Revised and corrected up to date.

(16) Orders issued to office staff, &c.

(17) Precedents—here note the cases.

(18) Health Unit Guide.

“Reference File”—This file should be made up as follows :—

Each division should be filed in a case cover and sub-divisions separated by sheets of foolscap. This case should be filed in a stiff file cover and the whole labelled “Reference File”.

13. *Staff Files*.—These files may be kept by the designation of an officer and when officers are transferred from one station to another the files should be retained and not transferred.

14. *Diaries*.—Each clerk will be provided with a diary with a separate space for each day in which he may make such notes of pending action as are laid down in the following paragraphs.

15. *Call-up System*.—The call-up system will take the place of the lists of unanswered letters. Immediately before the despatch of an outward letter requiring a reply, the clerk will note a call-up date on the office copy and book the case in his diary for the date fixed. A reasonable time should always be allowed for replies which are not urgent say, at least one month, and the call-up date settled accordingly.

16. *Check of Call-up Dates.*—Every morning each clerk will turn up his diary for the day and call attention to overdue cases booked for reply on that date.

*Three Days Rule.*—Clerks should endeavour to clear off “action papers” daily if possible. In no case must an action paper lie without their attention for more than three days unless special sanction has been received for longer delay. (“Action papers” are those requiring attention in the office.)

#### *Letters and Documents Exempted from Registration*

The following letters and documents are exempted from registration :—

- (1) Infectious diseases cards and notifications.
- (2) Vouchers and travelling claims.
- (3) Leave applications.
- (4) Building applications.
- (5) Licensing trades—areas under local authorities.
- (6) Returns of hook-worm treatment.
- (7) Vaccination returns.
- (8) Communicable diseases returns.
- (9) Monthly Sanitary Reports.
- (10) All other unimportant papers for which permission for exemption must be obtained from the Medical Officer of Health.

*Reasons for Exemption.*—Numbers 1 to 5 above are exempted as separate registers are maintained in each case.

Number 6—these returns should be submitted weekly, by the officers who administer hook-worm treatment, to the office on form Medical Anky. 22, with the treatment book Medical Anky. 5. The clerk should check the figures, initial the book and take over the return. These returns should be collected and at the end of a week, he should prepare a return and send it to the D.M. & S.S. Colombo.

Number 7—this is a seasonal activity and the necessary returns are submitted by the officers concerned.

These are collected and placed in a folder.

Numbers 8 and 9—these are periodical returns and reports, and are self-explanatory.

No. 10—these papers are destroyed after six months.

#### STANDARD LIST OF FILES FOR THE USE OF THE OFFICE OF A MEDICAL OFFICER OF HEALTH

(Note.—A General File should contain all papers dealing with the main subject in general. Every subsidiary file should contain only papers dealing with the subsidiary subject.)

1. Accounts—General.
  1. (A) Do. Travelling Allowance.
  1. (B) Do. Wages of Minor Staff.
  1. (C) Do. Rent Allowance.
  1. (D) Do. Office Rent.
  1. (E) Do. Petty Cash Account.
  1. (F) Do. Fines.
  1. (G) Do. Cost of services rendered to other Depts.
  1. (H) Do. Telephone calls.
2. Anniversary Celebrations.
3. Buildings—General.
  3. (A) Do. Health Unit Office.
  3. (B) Do. M. O. H's quarters.
  3. (C) Do. Clinic.
  3. (D) Do. Maternity Homes.
4. Burial Grounds and Cemeteries —General.
  4. (A) Do. Public.
  4. (B) Do. Family.
  4. (C) Removal of corpse outside the area.
5. Cholera Measures —General.
  5. (A) Do. Preventive.
  5. (B) Do. Reports.
6. Circulars from D. M. & S. S.
  6. (A) Do. by M. O. H.
  6. (B) Do. from others.
7. Conferences and Meetings—General.
  7. (A) Conference and Meetings of M. O. H.
  7. (B) Do. with Local Bodies.
  7. (C) Do. of Sanitary Inspectors.
  7. (D) Do. of Public Health Nurses.
  7. (E) Do. of Midwives.
  7. (F) Do. of Health Unit Staff.

8.	Communicable Diseases —Minor—General.
8. (A)	Do. Chicken Pox.
8. (B)	Do. Measles.
8. (C)	Do. Dysentery.
8. (D)	Do. Mumps.
8. (E)	Do. Typhoid.
8. (F)	Do. Phthisis.
8. (G)	Do. Diphtheria.
8. (H)	Do. Whooping Cough.
8. (I)	Do. Reports and Statements
9	Conservancy and Scavenging --General.
9. (A)	Do. U. C. areas.
9. (B)	Do. T. C. areas.
9. (C)	Do. Rural areas.
10.	Dental Clinics.
11.	Disinfection.
12.	Drainage—General.
12. (A)	Do. Public Drains.
12. (B)	Do. Private Drains.
13.	Festivals—General.
13. (A)	Do. (name of place)
13. (B)	Do. ( do. )
14.	Filariasis.
15.	Food Sanitation—General.
15. (A)	Do. Aerated Water Manufactories.
15. (B)	Do. Bakeries.
15. (C)	Do. Hotels and Eating-houses.
15. (D)	Do. Tea and Coffee Boutiques.
15. (E)	Do. Lodging Houses.
15. (F)	Do. Fairs.
15. (G)	Do. Dairies.
15. (H)	Do. Fish stalls.
15. (I)	Do. Meat stalls.
15. (J)	Do. Vegetable stalls.
15. (K)	Do. Hawking of food.
15. (L)	Do. Markets.
16.	General Elections.
17.	Health Activities —General.
17. (A)	Do. Health Exhibitions.
17. (B)	Do. Lectures and Talks.
17. (C)	Do. Health and Baby Week.
17. (D)	Do. Clinics.
18.	Health Survey—General.
18. (A)	Do. Survey and tabulations.
18. (B)	Do. Reports.
19.	Hook-worm Treatment—General.
19. (A)	Do. Programmes.
19. (B)	Do. In Villages.
19. (C)	Do. In Estates.
19. (D)	Do. In Schools.
19. (E)	Do. Returns, &c.
20.	Inspection Notes—Superior Officers.
20. (A)	Do. Others.
21.	Instructions to M. O. H.
21. (A)	Do. to Sanitary Inspectors.
21. (B)	Do. to .....
22.	Laboratory Examinations—General.
22. (A)	Do. Milk.
22. (B)	Do. Water.
22. (C)	Do. Blood.
22. (D)	Do. Urine.
22. (E)	Do. Faeces.
22. (F)	Do. Sputum.
22. (G)	Do. Brain—Rabies.
22. (H)	Do. Rats.
22. (I)	Do. Food-stuff.
23.	Lantern and Slides.
24.	Local Bodies—General.
24. (A)	Do. U. C.
24. (B)	Do. T. C.
24. (C)	Do. V. C.
24. (D)	Do. R. E. D. C.
24. (E)	Do. Health League.

- 25. Latrines, &c. —General.
- 25. (A) Do. Public Latrines.
- 25. (B) Do. Private Latrines.
- 25. (C) Do. School Latrines.
- 25. (D) Do. Bucket Latrines.
- 25. (E) Do. Pit Latrines.
- 25. (F) Do. Mound Latrines.
- 25. (G) Do. Water Carriage Latrines.
- 25. (H) Do. Squatting Plates.
- 25. (I) Do. Latrine Construction.
- 25. (J) Do. Latrine Returns.
- 25. (K) Prosecution for non-construction of latrines.
- 26. Leave—General.

(Only correspondence should be filed here. Applications for leave should be filed in the various Staff Files.)

- 27. Leprosy Measures—General.
- 27. (A) Do. Cards.
- 27. (B) Do. Returns.
- 27. (C) Do. Reports.
- 28. Malaria Measures —General.
- 28. (A) Do. Tabulations and Charts.
- 28. (B) Do. Statistics.
- 28. (C) Do. Rainfall.
- 28. (D) Malaria Measures —Entomological Findings.
- 28. (E) Do. Spleen Survey.
- 28. (F) Do. Reports.
- 28. (G) Do. Out-breaks of Malaria.
- 28. (H) Do. Quinine distribution centres.
- 28. (I) Do. River Oiling.
- 28. (J) Do. Medical Comforts.
- 28. (K) Do. Fish nursery.
- 28. (L) Do. Examination of Blood films.
- 28. (M) Do. Spraying.
- 28. (N) Do. River Training Works.
- 28. (O) Do. Rural Malaria Control Work.
- 28. (P) Do. Malaria Bulletin.
- 28. (Q) Do. Temporary Hospitals, &c.
- 28. (R) Do. Drugs, Quinine.
- 28. (S) Do. Temporary Staff.
- 28. (T) Do. Anti-malaria work in U. C. Areas.
- 28. (U) Do. Anti-malaria work in V. C. Areas.

- 29. Maps, spot pins, &c.
- 30. Maternity and Child Welfare —General.
- 30. (A) Do. Urban Area.
- 30. (B) Do. Rural Area.
- 30. (C) Do. Clinics.
- 30. (D) Do. Creches.
- 30. (E) Maternity Homes.
- 30. (F) Grants to Local Bodies for Maternity and Child Welfare Work.
- 31. Miscellaneous—

(Papers which do not come under the other classified subjects in this list should be filed here into parts.)

- 32. Nuisance—General.
- 32. (A) Do. Fly Nuisance.
- 32. (B) Do. Mosquito Nuisance.
- 33. Office Organization and System.
- 34. Ordinances, Regulations and By-laws.
- 35. Plague Measures —General.
- 35. (A) Do. Rat measures.
- 35. (B) Do. Grain Stores.
- 35. (C) Do. Reports.
- 35. (D) Do. Regulations.
- 35. (E) Do. Returns.
- 36. Posters, Pamphlets, and Leaflets.
- 37. Printed Forms.
- 38. Programmes —M. O. H.
- 38. (A) Do. Sanitary Inspectors.
- 38. (B) Do. Public Health Nurses.
- 38. (C) Do. Midwives.
- 38. (D) Do. Medical Officers doing Health work.
- 39. Prosecutions.
- 40. Publications.



41. Public Premises—General.
41. (A) Do. Railway.
41. (B) Do. Rest-houses.
41. (C) Do. Government Buildings.
41. (D) Do. Slaughter-house.
41. (E) Do. Cattle Pounds.
41. (F) Do. Places of Worship.
41. (G) Do. Bathing Places.
41. (H) Do. Trenching, Composting or Dumping Grounds.
42. Reports and Returns of Activities—General.  
(Each kind of return will be filed under each sub-file under the appropriate subject and not here.  
These files will contain facts and figures of various subjects compiled into reports and returns.)
42. A) Reports and Returns of Activities—Annual.
42. (B) Do. Half Yearly.
42. (C) Do. Quarterly.
42. (D) Do. Fortnightly.
42. (E) Do. Weekly.
43. School Health Work—General.
43. (A) Do. Health Education Activities.
43. (B) Do. Medical Inspection of Schools.
43. (C) School Health Work—Terminal Reports.
43. (D) Do. Annual Reports.
43. (E) School Health Survey.
43. (F) Supply of spectacles.
44. Score Cards—Medical Officer of Health.
44. (A) Do. Sanitary Inspectors.
44. (B) Do. Public Health Nurses.
44. (C) Do. Midwives.
45. Staff—Medical Officer of Health.
46. Staff—Clerks.
47. Staff—Peons and Orderlies or Field Attendants.
48. Staff—Sanitary Inspectors (name of place)
48. (A) Do. do. (.....)
48. (B) Do. do. (.....)
- &c.
49. Staff—Public Health Nurse (name of place)
49. (A) Do. do. (.....)
- &c.
50. Staff—Midwife (name of place)
50. (A) Do. (.....)
50. (B) Do. (.....)
- &c.
51. Staff—Temporary Officers.
52. Stationery.
53. Stores—General
53. (A) Do. Annual Estimates.
53. (B) Do. Requisitions—Government Stores.
53. (C) Do. Requisitions—Civil Medical Stores.
53. (D) Do. Prisons Department.
53. (E) Do. Inventory Book and Inventory Sheets and verification.
53. (F) Do. Surgical Instruments, &c.
53. (G) Do. Consumable Stores.
53. (H) Do. Superfluous Stores.
53. (I) Do. Equipment.
53. (J) Do. Uniforms.
53. (K) Stores —Transport of Stores.
53. (L) Do. Loan of Stores.  
(Receipt Vouchers and Issue Orders should be kept each kind in a file, in order.)
54. Trades —General.
54. (A) Do. Soap Manufactories.
54. (B) Do. Laundries.
54. (C) Do. Galas and Cattle Sheds.
54. (D) Do. Desiccating Mills.
54. (E) Do. Fibre Dyeing.
54. (F) Do. Fibre Mills.
54. (G) Do. Oil Manufactories.
54. (H) Do. Hide Stores.
54. (I) Do. Brick Kilns.
54. (J) Do. Lime Kilns.
54. (K) Do. Kraals—Coconut Husks.
54. (L) Do. Kraals—Fishing.
54. (M) Do. Manure Stores.



- 54. (N) Trades—Plumbago sheds and mines.
- 54. (O) Do. Quarries—cabook.
- 54. (P) Do. Quarries—metal.
- 55. Type Plans.
- 56. Urinals.
- 57. Vaccination —General.
- 57. (A) Do. Programmes.
- 57. (B) Do. Calf Lymph.
- 57. (C) Do. Returns.
- 58. Vital Statistics —General.
- 58. (A) Do. Return of Births.
- 58. (B) Do. Return of Deaths.
- 58. (C) Do. Return of Still Births.
- 58. (D) Do. Investigations—Deaths.
- 59. Wells and Water Supplies.
- 60. Visitors.
- 61. Nutrition, general.
- 61. (A) Nutritional survey.
- 62. Appraisal of work done.
- 63. Social Hygiene (General).
- 63. (A) Social Hygiene Clinics.
- 64. Training of officers.
- 65. Library.
- 66. Estates (General).
- 66. (A) (A sub-file for each estate.)
- 67. Dispensaries.
- 67. (A) A sub-file for each Central Dispensary.
- 68. Small-pox (General).
- 68. (A) Do. Reports and Returns.
- 69. Yaws (General).
- 69. (A) Do. Reports and Returns.
- 70. Discontinued officers.
- 71. Non-Ceylonese employees.
- 72. Rural Sanitation work by Apos. (General.)
- 72. (A) Do. (A sub-file for each central dispensary undertaking health work.)
- 73. Knowledge of vernaculars.
- 74. Diaries (General).
- 74. (A) Do. a sub-file for each officer.
- 75. Rural uplift (General).
- 75. (A) A sub-file for each centre.
- 76. Relief arrangements to Apos.

## APPENDIX 7 (a)

### THE LIST OF FURNITURE REQUIRED FOR A HEALTH UNIT OFFICE

#### For Medical Officer of Health—

1 pedestal table	1 paper rack
1 book stand	1 wall mirror
1 screen	1 chamber-pot stand
2 office trays	4 chairs with arms
1 wastepaper basket	1 chart board
1 wash stand	Frames for mounting maps
1 hat rack	

#### For the Clerk—

1 pedestal table	1 filing cabinet
2 chairs with arms	1 rack for vertical files
1 typist's table	1 wastepaper basket
1 typist's stool	1 hat rack
1 book stand	

#### For the Sanitary Inspectors—

2 office tables	2 paper racks
2 chairs with arms	4 office trays
2 chairs without arms	2 wastepaper baskets
1 hat rack	1 chart board

#### For the Public Health Nurse—

1 office table	1 wall mirror
1 chair with arms	1 chamber-pot stand
2 chairs without arms	1 examination bed or table
1 wash hand stand	1 filing cabinet
1 folding screen	1 chart board
1 paper rack	1 bench with back
2 office trays	

#### For the Laboratory—

1 laboratory table and cabinet	1 laboratory stool
--------------------------------	--------------------

#### General—

6 benches with backs	6 chairs without arms
1 small table for peon	4 almirahs for linen, instruments, drugs stationery and miscellaneous articles
1 stool for peon	2 commodes
1 blackboard with stand	Racks for store room
1 noticeboard	
1 office table for clinic work	

## APPENDIX 7 (b)

### LIST OF FURNITURE REQUIRED FOR A HEALTH CENTRE

#### Doctor's room—

1 office table	1 wash stand
1 chair with arms	1 screen
1 chair without arms	1 hat rack
1 examination bed	1 hospital stand for instruments, &c.

#### Nurse's room—

1 office table	1 wall mirror
1 chair with arms	1 screen
1 chair without arms	1 almirah
1 wash stand	1 bench with back

#### Reception hall—

1 office table	12 benches with backs, 5 feet long
1 small low table	1 filing box
1 chair with arms	1 blackboard
3 chairs without arms	

#### Milk room—

1 almirah	2 chairs
1 table	

#### Bathroom—

2 commodes for babies	1 basket
1 zinc bath	

# APPENDIX 7 (c)

## EQUIPMENT REQUIRED FOR A MATERNITY HOME OF TWELVE BEDS

<i>Price</i> <i>List No.</i>		<i>Section</i>	
		Furniture	
	Almirahs ..	..	4
	Soiled linen ..	..	
	Baskets ..	..	4
	Beds, labour ..	..	1
	Beds, maternity ..	..	6
	Beds, waiting room ..	..	7
	Benches ..	..	2
	Chairs, arm ..	..	4
	Cupboards (medicine) ..	..	2
	Safes (meat) ..	..	1
	Stands, hospital (bedside) ..	..	12
	Tables ..	..	4
	Kitchen table ..	..	1
	Racks with 4 shelves ..	..	2
	Wash stand (hand) ..	..	2
	Canvas stretcher ..	..	1
	Screens ..	..	1
	Incubators ..	..	1
		Section C	
2909 ..	Brooms, coir, with handles ..	..	4
2916 ..	Brooms, ekel, with handles ..	..	4
2948 ..	Clock, Big Ben ..	..	1
2977 ..	Bees wax lb. ..	..	1
2982 ..	Bath bricks ..	..	1
3002 ..	Metal polish lb. ..	..	3
3005 ..	Napthelene balls lb. ..	..	1
3017 (a) ..	Caustic soda lb. ..	..	6
3145 ..	Kitchen knives ..	..	2
3297 ..	Kettle cast, iron ..	..	2
3030 ..	Emery cloth No. 1 ..	..	4
3342 ..	Table lamps ..	..	2
3361 ..	Hurricane lanterns ..	..	3
3152 ..	Tea spoons ..	..	3
3380 ..	Vicks $\frac{1}{2}$ in. yds. ..	..	2
3384 ..	Vicks 1 in. yds. ..	..	1
3672 ..	Enamel, black ..	..	1
3678 ..	Enamel, white ..	..	1
3498 ..	Box of matches doz. ..	..	3
3593 ..	Kerosene oil gal. ..	..	12
3611 ..	Petrol gal. ..	..	1
3794 ..	Sand paper No. 1 doz. ..	..	$\frac{1}{2}$
3796 ..	Sand paper No. 2 doz. ..	..	$\frac{1}{2}$
3784 ..	Rugs coir ..	..	2
4334 ..	Mamoties' ..	..	1
4398 ..	Rakes with 14 teeth ..	..	1
Spl. ..	Sauce-pans for boiling milk, 8 qts. ..	..	4
Spl. ..	Sauce-pans, 4 qts. ..	..	1
Spl. ..	Hanging lamp (Titus) for labour room ..	..	1
		Section D	
4726 ..	Camblies ..	..	2
4725 ..	Blankets ..	..	6
4849 ..	Clothes, checked, grey ..	..	200
	Jackets, women ..	..	100
5074 ..	Mackintosh 3 ft. by 4 ft. ..	..	12
5077 ..	Mattress cover ..	..	13
5080 ..	Mattress, coir, to suit the bed ..	..	13
5094 ..	Pillows, coir ..	..	15
5097 ..	Pillows with flaps ..	..	25
5095 ..	Pillows, cotton ..	..	2
5104 ..	Bed sheets, grey ..	..	40
5128 ..	Bath towels ..	..	25
5131 ..	Towels, hand ..	..	25
5133 ..	Towels, marked, glass ..	..	5
5137 ..	Towels, kitchen ..	..	15
5121 ..	Needle, sewing, doz. ..	..	1
	Cotton, white, 20 yd. reels ..	..	2
Spl. ..	Coir mattresses for babies' cots ..	..	13
Spl. ..	Baby binders ..	..	50

Spl.	..	Baby shirts	..	..	..	50
Spl.	..	Bed covers, white	..	..	..	8
Spl.	..	Dusters, red checked	..	..	..	12
Spl.	..	Baby napkins	..	..	..	40
Spl.	..	Towels, dressing	..	..	..	12
Spl.	..	Overall, surgeon's	..	..	..	1
Spl.	..	Overalls, midwives	..	..	..	6
Spl.	..	Women binders	..	..	..	50

#### Section E

5038A	..	Buckets galvanized (water)	..	..	..	4
5255	..	Buckets galvanized (latrine)	..	..	..	2
5285	..	Bath zinc	..	..	..	2
5259A	..	Slop pail for soil dressings	..	..	..	1
5332	..	Coconut scraper	..	..	..	1
5335	..	Curry stone	..	..	..	1
5336	..	Dustbin with cover	..	..	..	1
5384	..	Wooden spoons, cooking	..	..	..	3
5415	..	Basin, large toilet, enamelled	..	..	..	2
5421	..	Chamber pots with covers	..	..	..	4
5425	..	Mugs, drinking, enamelled	..	..	..	7
5433	..	Jugs, toilet, large	..	..	..	1
5432	..	Plates, enamelled	..	..	..	7
5441	..	Dish, soap	..	..	..	2
5774	..	Wooden ticket frames	..	..	..	7
Spl.	..	Pounder and pestle	..	..	..	1
Spl.	..	Mats	..	..	..	10
Spl.	..	Charts frame	..	..	..	6
Spl.	..	Bed pans, enamelled	..	..	..	4
Spl.	..	Basin, wash, enamelled	..	..	..	3
Spl.	..	Bath, baby's, on stand	..	..	..	1
Spl.	..	Galvanized cistern for storing water	..	..	..	1
5828	..	Soap, carbolic, bars	..	..	..	2
5830	..	Soap, monkey brand, pkts.	..	..	..	3
5836	..	Soap, bar, Ceylon	..	..	..	6

#### LIST OF APPLIANCES (OBSTETRIC) REQUIRED FOR A MATERNITY HOME

1.	Midwifery forceps, Anderson's, with axis traction	..	..	..	1
2.	Perforator, Simpson's..	..	..	..	2
3.	Forceps, dissecting	..	..	..	1
4.	Forceps, artery	..	..	..	6
5.	Forceps, uterine <i>Vulsellum</i>	..	..	..	1
6.	Specula, vaginal, Sim's	..	..	..	1
7.	Pelvimeters	..	..	..	1
8.	Craniotomy forceps	..	..	..	1
9.	Breech Hooks	..	..	..	1
10.	Forceps, tissue, Lane's	..	..	..	4
11.	Intravenous Saline apparatus	..	..	..	1
12.	Large curved needles for perineal suture	..	..	..	6
13.	Clip, towel	..	..	..	1
14.	Mucus Extractor	..	..	..	2
15.	Scissors, pairs	..	..	..	1
16.	Razor, safety	..	..	..	1
17.	A douche can with rubber tube, &c.	..	..	..	
18.	Catheter I. R.	..	..	..	
19.	Hypodermic syringe, 2 cc.	..	..	..	1
20.	Stethoscope, wooden	..	..	..	1
21.	Gas, mouth (Ferguson's)	..	..	..	1
22.	Syringes, glass, vaginal	..	..	..	1
23.	Inhalers, Chloroform	..	..	..	1
24.	Funnels, glass	..	..	..	1
25.	Measure glass (8 oz.)	..	..	..	1
26.	Measure glass (2 drams)	..	..	..	1
27.	Glass Test for Urinometer	..	..	..	1
28.	Test-tube holders	..	..	..	1
29.	Urinometers, glass	..	..	..	1
30.	Bowls, glass, Lotions	..	..	..	1
31.	Boxes, glass, for needles	..	..	..	1
32.	Sabiner instruments small	..	..	..	1
33.	Douche reservoir	..	..	..	1

34.	Jars, glass, dressings ..	..	..	1
35.	Relievers, breast ..	..	..	1
36.	Sphygmomanometer ..	..	..	1
37.	Syringes, serum, 10 cc.	..	..	1
38.	Tubes, stomach, rubber	..	..	1
39.	Catheters, plated, female	..	..	1
40.	Probes, uterine ..	..	..	1
41.	Bottles drop, chloroform	..	..	1
42.	Funnel, enamelled ..	..	..	1
43.	Measure glass 2 oz. ..	..	..	1
44.	Cream meters ..	..	..	1
45.	Lamps, spirit, brass ..	..	..	1
46.	Test-tube stand ..	..	..	1
47.	Bottles, hot water, I. R.	..	..	1
48.	Boxes, japanned tin, for dressing	..	..	1
49.	Cups, feeding, enamelled	..	..	1
50.	Douche fittings, vulcanite set	..	..	1
51.	Baby weighing machine	..	..	1
52.	Scissors, counter ..	..	..	1
53.	Sterilizer instruments	..	..	1
54.	Midwifery bag, fully equipped	..	..	1
55.	Sterilizer, drum (med. size)	..	..	2

#### STANDARD LIST OF DRUGS FOR A MATERNITY HOME

<i>Section A</i>				
1.	Acid, Boric	..	..	1 lb.
2.	Chloral Hydras	..	..	4 oz.
3.	Hydrarg Perchlor Tablet	..	..	25 tablets
4.	Mag. Sulph.	..	..	14 lb.
5.	Pot. Brom.	..	..	4 oz.
6.	Pot. Cit.	..	..	4 oz.
7.	Sodii Bicarb.	..	..	1 lb.
<i>Section B</i>				
8.	Aether Anaesthetic	..	..	4 oz.
9.	Chlorof Anaesthetic	..	..	1 lb.
10.	Ext. Ergot. Liq.	..	..	1 lb.
11.	Ol. Ricini	..	..	5 lb.
12.	Liq. Cresol Sap.	..	..	1 lb.
13.	Spt. Surgical	..	..	1 lb.
<i>Section C</i>				
14.	Cotton Wool	..	..	6 lb.
15.	Lint, Hospital	..	..	6 lb.
16.	Gauze, Absorbent	..	..	6 lb.
17.	Cellulose Wadding	..	..	6 lb.
18.	Dextrose	..	..	2 lb.
19.	Argent Nit. Solution	..	..	2 oz.
20.	Ergometrine amps.	..	..	1 box
21.	Pituitary Extract $\frac{1}{2}$ cc. amps.	..	..	1 box
22.	Pituitary Extract 1 cc. amps.	..	..	1 box
23.	Coramine injections amps.	..	..	1 box
24.	Pitocin amps.	..	..	1 box
25.	Camphor and Ether	..	..	1 box
26.	Sulphapyridine (M and B, 693) tabs or Sulphatriad	..	..	100 tabs.
27.	Digitalin (Hypod. tabs) tubes	..	..	1 tube
28.	Chloral and Bromide Draught lb.	..	..	2 lb.
29.	Glucose Saline, bottles	..	..	2 bots.
30.	Grape Sugar Solutions 25 cc. amps.	..	..	4 amps.
31.	Vitamin K tabs.	..	..	100
32.	Vitamin K amps.	..	..	6
33.	Lobeline amps.	..	..	6
34.	Dettol lb.	..	..	2 lb.
<i>Section "Q"</i>				
35.	Quinine Bisulph	..	..	1 oz.
<i>Section "OP"</i>				
36.	Morph Hydroch $\frac{1}{4}$ gr. (hyp. tabs.) tubes	..	..	1 tube
37.	Morph and Scopolamine	..	..	1 box

*Note.*—Requisitions are attended to by different sections independently. Hence when applying for drugs, separate requisitions on Form Medical 166 should be forwarded.



LIST OF REGISTERS AND BOOKS TO BE MAINTAINED IN A MATERNITY HOME

- 1. Patients' Property Register, Medical 98
- 2. Minor Employees' Attendance Register
- 3. Milk Register
- 4. Register of shortages and Rejection of Provisions
- 5. Medical Officers' Inspection of Provisions
- 6. Inventory List
- 7. Maternity Home's Monthly Returns, Circular No. PB 168/43 of July 27, 1948.
- 8. Complaint Book
- 9. Visitors' Books (Official and Unofficial)
- 10. Form of Contract, Medical 50
- 11. Diet Table, Medical 31
- 12. Analysis of Diet, Medical 31A
- 13. Table of Extras, Medical 32
- 14. Summary of Extras, Medical 32A
- 15. Admission Register
- 16. Bed Head Tickets, Medical 26
- 17. Sick and Distribution of Patients, Medical 102
- 18. Statement of Still Births
- 19. Weekly Diet Distribution of Patients, Medical 102
- 20. Statement of work done for current year and five years previously
  - (a) Admission
  - (b) Deliveries
  - (c) Normal Deliveries
  - (d) Abnormal Deliveries
  - (e) Live Births
  - (f) Still Births
  - (g) Miscarriages
  - (h) Maternal Deaths
  - (i) Infant Deaths
- 21. Clinic Charts as usual
- 22. Midwife's Charts (in case village work is done) as usual

HEADINGS IN THE ADMISSION REGISTER OF MATERNITY HOME

- 1. Serial Number
- 2. Date of Admission
- 3. Name of mother
- 4. Age
- 5. Race
- 6. Marital condition : L. M. .. Legally married
  - M. .. Married
  - U. M. .. Unmarried
  - S. .. Single
- 7. Occupation of mother
- 8. Address
- 9. Name of Husband
- 10. Occupation
- 11. Period of Gestation
- 12. Ante-natal Care (yes, no, duration)
- 13. Date of Delivery
- 14. Sex of Infant
- 15. Weight of Infants at birth
- 16. Nature of labour (normal, abnormal, instrumental)
- 17. Nature of Puerperium (normal, abnormal)
- 18. Date of Discharge or Death (in red ink)
- 19. Condition of Mother (on admission and discharge)
- 20. Condition of Infant (on admission and discharge)
- 21. Reference number of bed head tickets
- 22. Haemoglobin
- 23. Index of Mother (a) on admission (b) discharge
- 24. Remarks

APPENDIX 7 (d)

STANDARD LIST OF EQUIPMENT—RURAL HOSPITALS

<i>Price</i>							
<i>List No.</i>	<i>Name of Article</i>		<i>12 Beds</i>		<i>Price</i>	<i>20 Beds</i>	
<i>Equipment B</i>							
Spl.	Sieve for kitchen		1	..	7 50	..	1
<i>Equipment C</i>							
2904	..	Brushes, banister	..	1	..	1 79	..
2906	..	Brushes, bas broom	..	2	..	3 90	..
2909	..	Brooms, coir	..	20	..	0 28	..

<i>Price</i>							
<i>List No.</i>		<i>Name of Article</i>	<i>12 Beds</i>		<i>Price</i>		<i>20 Beds</i>
2910	..	Brushes, scrubbing ..	2	..	0 26	..	2
2916	..	Brooms, ekel ..	30	..	0 26	..	36
2928	..	Brushes, white-washing ..	1	..	0 63	..	1
2930	..	Brushes, nail ..	2	..	0 57	..	2
2937	..	Mops with handles ..	2	..	2 36	..	2
2948	..	Clock, Big Ben (Ingraham)	1	..	11 2	..	1
2982	..	Bath bricks ..	4	..	0 24	..	4
3017	..	Soda, washing ..	48	..	0 9	..	48
3140	..	Forks, desert ..	3	..	0 55	..	3
3142	..	Knife, bread ..	1	..	4 0	..	1
3143	..	Knife, desert ..	2	..	0 91	..	2
3145	..	Knife, kitchen ..	1	..	1 85	..	1
3148	..	Spoons, desert ..	2	..	0 61	..	2
3151	..	Spoons, table ..	2	..	1 1	..	2
3152	..	Spoons, tea ..	2	..	0 37	..	2
3271	..	Boiler, enamelled (ten gal.)	1	..	43 63	..	1
3286	..	Frying pan ..	1	..	5 48	..	1
3297	..	Kettle, enamelled (4 qts.)	1	..	8 5	..	1
3305	..	Saucepan (3 qts.) ..	2	..	4 93	..	2
3306	..	Saucepan (4 qts.) ..	3	..	5 78	..	3
3361	..	Lantern, hurricane ..	6	..	4 75	..	6
3471	..	Padlock, Yale ..	2	..	3 85	..	2
4364	..	Mamoties ..	2	..	1 42	..	2
4334a	..	Mamoty handles ..	2	..	1 12	..	2

*Equipment D*

4721b	..	Bags, linen, canvas ..	..	2	..	10 0	..	2
4726	..	Blankets ..	..	4	..	12 0	..	4
4847	..	Aprons, attendants' ..	..	13	..	0 95	..	20
4848a	..	Banians, grey, male ..	..	40	..	2 68	..	75
4849a	..	Cloths, checked, grey ..	..	90	..	2 50	..	150
5006	..	Banians, flannel ..	..	6	..	3 78	..	10
5016	..	Jackets, patients', female	..	40	..	1 64	..	75
5024	..	Shirts, grey, children's ..	..	12	..	1 19	..	20
5039	..	Cotton cumblies ..	..	24	..	2 0	..	40
5044	..	Diapers, female ..	..	30	..	0 80	..	50
5077	..	Mattress covers ..	..	20	..	10 41	..	28
5081	..	Mattress, coir ..	..	12	..	16 9	..	20
5090	..	Netting, mosquito (yds)...	..	4	..	3 81	..	10
5094	..	Pillows, coir ..	..	16	..	1 14	..	24
5095	..	Pillows, cotton ..	..	10	..	1 78	..	10
5096	..	Pillow cases for coir pillows	..	18	..	0 84	..	26
5097a	..	Pillow cases for cotton pillows	..	30	..	1 8	..	40
5104	..	Sheets, bed, grey ..	..	40	..	6 43	..	75
5108	..	Sheets draw Willesdun ..	..	12	..	5 75	..	20
5130	..	Towels, hand, kannanore..	..	8	..	1 15	..	8
5131	..	Towels, hand, grey ..	..	18	..	1 13	..	18
5046	..	Dusters ..	..	6	..	0 52	..	6

*Equipment E*

5246	..	Winnow ..	1	..	1 0	..	1
Spl.	..	Mortar, small (stone), and pounder	1	..	25 0	..	1
5249	..	Tub, bath, galvanized ..	2	..	12 41	..	2
5250	..	Bucket, galvanized iron ..	6	..	9 90	..	6
5255	..	Bucket, latrine, S. T. pattern	4	..	8 39	..	4
5259a	..	Pails, slop, enamelled, with covers	2	..	12 0	..	2
5298	..	Can, watering, with lip ..	1	..	8 50	..	1
5331	..	Strainer, soup, enamelled	1	..	9 50	..	1
5331a	..	Strainer, tea ..	1	..	1 50	..	1
5332	..	Coconut-scraper ..	1	..	3 50	..	1
5335	..	Curry-stone and roller ..	1	..	8 0	..	1
5336	..	Dustbin with cover, galvanized	2	..	10 44	..	2
5342	..	Bowls of sizes ..	4	..	0 60	..	4
5353	..	Pots, chamber, with cover, enamelled	8	..	1 97	..	8
5359	..	Cups, tea, earthen ..	2	..	0 42	..	2
5360	..	Saucers, tea, earthen ..	2	..	0 25	..	2
5380	..	Jugs, milk, earthen ..	2	..	1 28	..	2
5400	..	Pots, tea, enamelled ..	1	..	8 0	..	1
5410	..	Tumblers, glass ½ pint ..	4	..	0 54	..	4
5415	..	Basins, toilet, enamelled ..	3	..	1 20	..	3
Spl.	..	Board, bread ..	1	..	9 0	..	1

<i>Price</i> <i>List No.</i>	<i>Name of Article</i>	<i>12 Beds</i>	<i>Price</i>	<i>12 Beds</i>
5419 ..	Can, hot water ..	1 ..	10 0 ..	1
	Can, milk ..	1 ..	22 50 ..	1
5426 ..	Cups, aluminium ..	12 ..	1 30 ..	20
5433 ..	Jugs, toilet ..	1 ..	4 16 ..	1
5434 ..	Jugs, milk, enamelled ..	2 ..	1 22 ..	2
5440 ..	Plates, aluminium ..	24 ..	1 40 ..	24
5441 ..	Dishes, soap, enamelled ..	12 ..	0 81 ..	22
5443 ..	Ladles, coconut shell ..	4 ..	0 10 ..	4
5641 ..	Mortar, wooden ..	1 ..	8 50 ..	1
5642 ..	Mortar, pounder ..	1 ..	8 50 ..	1
5774 ..	Frames, bed head ticket ..	12 ..	1 23 ..	20
	Frames, temperature chart ..	12 ..	3 50 ..	20
5887 ..	Soap, bar, two ..	20 ..	0 45 ..	24
5828 ..	Soap, carbolic, two ..	8 ..	0 69 ..	12
5833 ..	Soap, salt (lb.) ..	28 ..	0 19 ..	28
5856 ..	Spring balance ..	1 ..	17 53 ..	1
Spl. ..	Rings for linen bag ..	2 ..	7 50 ..	2
Spl. ..	Storage vessels for water ..	1 ..	28 50 ..	1
5706 ..	Stretcher, milla, with white canvas ..	1 ..	55 0 ..	1

*Equipment F*

7503	Torch, electric, hand (3 cells)	1	4 22 ..	1
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*Sketch*  
*No.* *Furniture*

1 ..	Almirah, linen (std. pattern)	2 ..	145 0 ..	2
3 ..	Cupboard, medicine, with chest	1 ..	165 0 ..	1
4 ..	Stands, hospital, with chest	12 ..	29 0 ..	20
5 ..	Safe, meat, with chest ..	1 ..	90 0 ..	1
6 ..	Screens, folding, wooden, with chest	2 ..	15 0 ..	2
12 ..	Towels horse or rack with chest	1 ..	7 50 ..	1
13 ..	Table, kitchen, with chest	1 ..	20 0 ..	1
15 ..	Table, wash hand, with chest	1 ..	24 0 ..	1
16 ..	Press, soiled linen, with chest	1 ..	30 0 ..	1
55 ..	Beds, wooden, with chest	12 ..	43 0 ..	20
59 ..	Chairs, easy, G. O. H., with chest	2 ..	35 0 ..	2
61 ..	Chairs, ladies, with chest	2 ..	18 0 ..	2
67 ..	Bed rests ..	2 ..	14 0 ..	2
69 ..	Shelves, set for store rooms	1 ..	65 0 ..	1
72 ..	Tray, wooden, tea ..	1 ..	9 50 ..	1
76 ..	Tables, dining, trestle ..	2 ..	34 0 ..	2
77 ..	Benches for dining table	4 ..	15 50 ..	4
80 ..	Table, writing ..	1 ..	52 50 ..	1
90 ..	Teapoy ..	1 ..	24 0 ..	1
	Ladders, folding (7-ft.) ..	1 ..	13 0 ..	1
	Notice-board 2 ft. by 1 ft.	1 ..	.. ..	1
	Tables, side, 3½ ft. by 2 ft.	2 ..	24 0 ..	2
56 ..	Labour bed ..	1 ..	30 0 ..	1
57 ..	Maternity beds with cot ..	2 ..	55 0 ..	3
63 ..	Stretchers, std. pattern ..	1 ..	15 0 ..	1
Spl. ..	Incubator ..	1 ..	30 0 ..	1

SURGICAL INSTRUMENTS AND EQUIPMENT FOR RURAL HOSPITALS

<i>Name</i>	<i>12 Beds</i>	<i>20 Beds</i>
<i>Group A—General</i>		
Bistouries, double ..	1 ..	1
Director, with scoop, plated ..	1 ..	1
Forceps, artery (Spencer Wells) ..	6 ..	6
Forceps, dissecting ..	2 ..	2
Forceps, dressing (Bryantis) ..	2 ..	2
Forceps, Sinus (Lister's) ..	1 ..	1
Holder, metal, for vaccine style ..	1 ..	1
Hooks, blunt and sharp ..	2 ..	2
Knives, abscess (Syme's) ..	1 ..	1
Knives, abscess (Syme's and Gum ) (Lancet) ..	1 ..	1
Knives, amputation ..	— ..	1
Needles, exploring ..	1 ..	1
Needles holder ..	1 ..	1
Probe, silver ..	1 ..	1

<i>Name</i>			<i>12 Beds 20 Beds</i>		
Razor, hollow-ground	..	..	..	1	1
Saw, amputation	..	..	..	—	1
Scalpel	..	..	..	2	2
Scissors, dressing	..	..	..	2	2
Scoops or spoons (Volkmann's) single	..	..	..	1	1
Stethoscopes, Pinands	..	..	..	1	1
Tourniquets, rubber	..	..	..	1	1
Trocar and Canula, exploring	..	..	..	1	1
Tubes, stomach, rubber	..	..	..	1	1
<i>Group B—Mouth</i>					
Depressor, tongue	..	..	..	1	1
Forceps, tongue (Thomsin's)	..	..	..	1	1
Gags, mouth (Ferguson's)	..	..	..	—	1
Probang, asceotic	..	..	..	1	1
Tubes, tracheotomy, plated	..	..	..	—	1
<i>Group C—Ear</i>					
Forceps, ear (Abbot's)	..	..	..	1	1
Speculum, aural, set of 3	..	..	..	1	1
Syringes, ear, metal	..	..	..	1	1
<i>Group D—Genito-Urinary</i>					
Catheters, female, Rotunds	..	..	..	1	1
Catheters, male, plated	..	..	..	2	2
Catheters, red rubber	..	..	..	2	2
Syringes, glass, vaginal	..	..	..	1	1
Syringes, glass, urethral	..	..	..	2	2
<i>Group E—Obstetrical and Gynaecological</i>					
Cephalotribes and Cranioclast (Jardine's)	..	..	..	—	1
Curettes, uterine, flushing	..	..	..	—	1
Decapitator (Jardine's)	..	..	..	—	1
Forceps, craniotomy (Barne's)	..	..	..	—	1
Forceps, midwifery, axis traction	..	..	..	—	1
Forceps, vulsellum, single	..	..	..	—	1
Hook, blunt and crochet, midwifery	..	..	..	—	1
Needles, perineum	..	..	..	—	1
Pelvimeter (Martin's)	..	..	..	—	1
Pelforator, craniotomy	..	..	..	—	1
Probe, uterine (Playfair's)	..	..	..	—	1
Speculum, vaginal (duckbill Simm's)	..	..	..	—	1
Tables, utrine, double (Bazemann's)	..	..	..	—	1
Tubes, vaginal, glass	..	..	..	—	1
<i>Group F—Dental</i>					
Forceps, tooth	..	..	..	2	2
<i>Group G—Post Mortem</i>					
Set of 20 pieces	..	..	..	—	1
<i>Group I—Nasal</i>					
Speculum, nasal (Fraemkel's)	..	..	..	1	1
<i>Group L—Anaesthetic</i>					
Inhalers, chloroform (Shimmelbusch's)	..	..	..	—	1
Bottles, drop, chloroform	..	..	..	—	1
<i>Group X—Dispensing Utensils</i>					
Funnels, enamelled	..	..	..	2	2
Funnels, glass	..	..	..	2	2
Measures, glass, 2 drams	..	..	..	2	2
Measures, glass, 2 oz.	..	..	..	2	2
Measures, glass, 8 oz.	..	..	..	2	2
Measures, glass, 1 pint	..	..	..	1	1
Mortars and pestles, composition	..	..	..	1	1
Mortars and pestles, glass	..	..	..	1	1
Pill tiles	..	..	..	1	1
Scales, dispensing with brass pillars	..	..	..	1	1
Scales, counter	..	..	..	1	1
Spatulas, steel	..	..	..	2	2



Group Y.—Laboratory Equipment

Name	12 Beds	20 Beds
Cream meters .. ..	2 ..	2
Glass test, for lactometer or urinometer .. ..	2 ..	2
Lamps, spirit, brass or glass .. ..	1 ..	1
Test-tube holders .. ..	1 ..	1
Test-tube stands .. ..	1 ..	1
Urinometers, glass .. ..	1 ..	1

APPENDIX 7 (e)

STANDARD LIST OF EQUIPMENT—CENTRAL DISPENSARIES

Price List No.	Name of Article	No. Required	Price Rs. c.
<i>Equipment A</i>			
1	Bells, Office .. ..	1 ..	7 50
81	Date Boxes .. ..	1 ..	4 0
160	Inkstands, Wooden .. ..	2 ..	2 35
255	Penracks, iron .. ..	1 ..	5 50
294	Rulers, Office, Ebony (18") .. ..	1 ..	12 0
<i>Equipment C</i>			
2910	Brushes, Scrubbing .. ..	2 ..	0 26
2930	Brushes, Nail .. ..	2 ..	0 57
2948	Clocks, Big Ben (Ingraham) .. ..	1 ..	11 2
3297	Kettles, enamelled (4 qts.) .. ..	1 ..	8 5
3342	Lamps, table .. ..	1 ..	9 6
3361	Lantern, hurricane .. ..	1 ..	4 75
3784	Rugs, door, coir (size wanted should be stated) .. ..	1 ..	2 83
<i>Equipment D</i>			
5039	Cotton Cumblies .. ..	6 ..	2 0
5046	Dusters .. ..	6 ..	0 52
5104	Sheets, bed, gray .. ..	2 ..	6 43
5130	Towels, hand, Cannanore .. ..	6 ..	1 15
5131	Towels, hand, Cannanore, gray .. ..	6 ..	1 13
<i>Equipment E</i>			
5228a	Baskets, soiled linen, square .. ..	1 ..	15 0
5240	Baskets, waste paper .. ..	1 ..	2 50
5250	Buckets, hand, galvanized .. ..	2 ..	9 90
5259a	Pails, slop, enamelled, with cover .. ..	2 ..	12 0
5336	Dust bins with cover .. ..	1 ..	10 44
5410	Tumblers Glass ( $\frac{1}{2}$ pint) .. ..	2 ..	0 54
5415	Basins, toilet, enamelled .. ..	1 ..	1 20
5433	Jugs, toilet, enamelled .. ..	1 ..	4 16
5441	Dishes, soap, enamelled .. ..	1 ..	0 81
5858	Weighing Machine (Adult) (particulars required) .. ..	1 ..	48 50
Spl.	Storage vessels for water (particulars required) .. ..	1 ..	28 50
<i>Equipment F</i>			
6189a	Torch, electric, hand (3 cells) .. ..	1	4 22
<i>Furniture</i>			
1	Almirah for printed forms (Standard Pattern) .. ..	1 ..	145 0
1	Almirah for drugs (Standard Pattern) .. ..	1 ..	145 0
4	Stands, Hospital (Standard Pattern) .. ..	2 ..	29 0
6	Screens, Folding, Wooden (Standard Pattern) .. ..	1 ..	15 0
18	Tables, Pedestal (Standard Pattern) .. ..	1 ..	60 0
20	Stationery Cases .. ..	1 ..	9 0
58	Benches, Wooden, with back rests (5' 6") .. ..	6 ..	42 0
60	Chairs, arm .. ..	2 ..	20 0
61	Chairs, ladies' .. ..	1 ..	18 0
69	Shelves set for store room .. ..	1 ..	65 0
71	Stand for water vessel .. ..	1 ..	28 0
73	Stool for orderly .. ..	1 ..	12 0
78	Sofa, coir stuffed and covered with leatherette .. ..	1 ..	114 0
80	Table, writing .. ..	1 ..	52 50
Spl.	Counters, Dispensing, with cupboard * .. ..	1 ..	
Spl.	Cupboards, Poison * .. ..		
Spl.	Notice-Boards (18" $\times$ 24") .. ..	1 ..	15 0
25	Table, common, with drawers .. ..	1 ..	25 0

\* 1. Dimensions required.  
2. Price to be ascertained from Prison Department.



# SURGICAL INSTRUMENTS

## Central Dispensaries

<i>Name</i>			<i>No. Required</i>
	<i>General</i>		
Kidney Trays 10" ..	..		2
Enamelled Iron Trays 10" × 7" ..	..		2
Wash stand with two 14" basins ..	..		1
Portable sterilizer with spirit lamp for instruments			1
Pails for soiled dressings ..	..		1
	<i>Instruments</i>		
Syme's abscess knife ..	..	..	1
Scalpels ..	..	..	1
Scissors, one point sharp, 5" long ..	..	..	1
Forceps, dissecting, 5" long ..	..	..	1
Treves toothed forceps ..	..	..	1
Spencer wells entry forceps, 5" long ..	..	..	2
Sinus forceps, Listers, 7 in. ..	..	..	1
Plated probe 6" ..	..	..	1
Blunt hooks ..	..	..	1
Tourniquets, rubber ..	..	..	1
Tongue depressor (adult size) ..	..	..	1
Aural specula (set of three) ..	..	..	1
Syringes 1 cc. ..	..	..	1
Syringes 10 cc. ..	..	..	1
Subcutaneous, intravenous and intramuscular needles for above			1
Glass boxes for needles ..	..	..	1
Female metal catheters ..	..	..	1
Rubber catheters, set of 6 sizes ..	..	..	1 Set

## APPENDIX 7 (f)

### LIST OF ARTICLES FOR A SMALL LABORATORY

The articles needed for a laboratory in a health unit office are—

A microscope with mechanical stage and oil immersion lens

A spirit lamp

2 platinum loops

1 loop rest

3 test-tube racks to hold 12 test-tubes each

1 hand centrifuge with tubes for same

1 staining tray

1 rack for bottles of stains with 4-oz. drop bottles

2 test-tube holders

2 pairs of forceps

A pair of scissors

1 dissecting board

A scalpel

Half gross test-tubes

Half gross cover slips

Half gross slides

3 watch glasses

6 hollow ground glass slides

6 petri dishes

3 each of 5 and 10 cc. flasks

3 each of 1, c. × 5 cc. pipettes

Large bottle for distilled water with tap

2 glass bowls for disinfectants

1 dozen 4-oz. drop bottles

1 glass slab 3 ft. × 2 ft.

1 urine analysis outfit

Canada balsam

Absolute alcohol

Methylated spirit

Sulphuric acid

Stains—

Aniline gentian violet

Methyl violet

Eosin

Zeil Neilsen

Methylene blue

Gram's Iodine

Leishman's

Specimen outfits.

## APPENDIX 8 (a)

### OUTLINE FOR A HEALTH SURVEY OF A MEDICAL OFFICER OF HEALTH'S DISTRICT

1. *Introduction* Why undertaken  
Acknowledgments to persons  
Reference to reports and printed matter
2. *The Area* Name. Location  
Extent in square miles  
Boundaries and subdivisions  
Topography : hills, valleys, plains, elevations  
Geology : Topsoil, subsoil, special features  
Hydrography : rivers, lakes, streams  
Vegetation  
Animal life  
Use of land, use of water  
Roads, parks  
Street lighting  
Communication
3. *Climate* Temperature  
  
Record by months  
  
Average  
Maximum  
Minimum  
  
Humidity  
  
Record by months  
  
Average  
Maximum  
Minimum  
  
Rainfall  
  
Record by years  
Record by months  
  
Average  
Maximum  
Minimum
4. *The People* The population of whole area at 1921 Census and  
at 1931 Census  
  
Estimate for year of survey  
  
The populations by subdivisions  
  
Chief Headmen's divisions  
Village Committee areas  
Town Council areas  
Urban Council Towns  
  
Population of villages classified as follows :—  
  
Villages with population below 250  
  
between 250 and 500  
between 500 and 1,000  
between 1,000 and 2,000  
between 2,000 and 3,000  
between 3,000 and 4,000, &c.  
  
Classification of population  
  
by sex  
by age groups  
by literacy  
by religion  
by race

## Density of population

whole area  
of subdivisions

## Industries and occupations

Economic condition of the people

Women and children in industry

Religion

Education

Government

Central

Local, e.g., Town Council, Urban Council, Village Committee

## 5. *Vital Statistics*

### Births and birth rates

for ten years preferably  
for five years at least  
for whole area  
for subdivisions

### Deaths and death rates

for ten years preferably  
for five years at least  
for whole area  
for subdivisions

### Infant mortality

for ten years preferably  
for five years at least  
for whole area  
for subdivisions  
causes of infant mortality

for past year

in the case of the thirty-seven proclaimed towns, for five years and the average to be taken

### Maternal mortality

only in the case of proclaimed towns  
for ten years preferably  
for five years at least  
causes of maternal mortality

### Chief causes of death

The chief causes of deaths in the area with special reference to  
Malaria, Ankylostomiasis, Typhoid fever, Dysentery,  
Plague, Cholera, Smallpox, Parangi, Leprosy, Pneumonia,  
Tuberculosis, Influenza, &c.

Specific death rates from these causes

Compare rates with those of similar districts and subdivisions.

### Morbidity statistics

Study those available at hospitals and dispensaries in the area.  
Classify morbidity statistics of the chief diseases by months  
for five years, and work out average for each disease.

Determine what percentage cases of malaria and hook-worm or  
other special disease form of the total cases.

Spleen survey and hook-worm egg count findings to be stated  
under malaria and hook-worm respectively.

Statement as to unusual diseases.

Notable outbreaks of diseases in the locality.

## **6. Sanitation**

### **Water supply**

- Sources, quality, quantity
- Control
- Communal supplies
- Individual supplies
- Consumption

### **Drainage—**

- Disposal of
  - Rain water
  - Sullage water
  - Other liquids

### **Disposal of human excreta**

- in towns
- in rural area
- Water carriage
- Pail latrines
- Pit latrines
  - deep pit
  - bored hole
  - mound
- Other methods
- Public latrines
- School latrines
- Sufficiency of latrines
- Notes on construction
- Trenching
- Composting
- Soil pollution

### **Disposal of refuse**

- in towns
- in rural areas
- Domestic receptacles for refuse
- Collection of refuse
- Disposal of refuse
  - dumps
  - fillings
  - incinerators
  - nuisances

- Disposal of manure
- Disposal of dead animals
- Utilization of refuse

### **Disposal of the dead**

- Burial and burial grounds
- Cremation
- Other methods
- Laws
- Religious customs

### **Housing**

- Application of the Housing Ordinance
- Data relating to houses according to headings of health survey form
- Latrine accommodation
- Cleanliness of dwellings and surroundings
- Bearing of housing on the health of the people
- Overcrowding
- Public buildings

## Food sanitation

General statement with regard to the food of the people

Milk supply

Meat supply

slaughter-houses

Fish supply

Vegetables and fruits

Markets

Bakeries

Tea Kiosks

Eating-houses, restaurants

Sundry boutiques

## Control of animals and insects

Dogs

Rats

Flies

Mosquitoes

Lice

Fleas

Other insects

## Miscellaneous items and offensive trades.

Laundries

Bathing places

Offensive trades

list

control

difficulties

## 1. Hygiene

### Maternity and Child Welfare

Maternity beds in hospitals in area

Work done in area

Midwives and their supervision

Extent of untrained midwifery

Nurses

Clinics

Ante-natal

Baby

Home visiting

Voluntary organizations engaged on it

### School Hygiene and Sanitation

No. of Schools

Classification of Schools

Primary, Junior Secondary, Senior Secondary, Collegiate

Boys, Girls, Mixed

Denomination

Government, Government-aided, private

Location, access

Construction

Lighting and ventilation

Playground facilities

Drinking facilities

Latrine and urinal accommodation

School furniture

Surroundings

Overcrowding

No. of school children

Girls, Boys



School Medical Inspection  
Findings of Medical Inspection  
Correction of defects  
Control of communicable diseases  
Health education  
    Routine health education procedure  
    Health instruction

## 8. *Health Administration*

### Public Health Authorities

Organization  
Powers and duties  
Work done  
Efficiency  
Appropriations  
    Proportion to total revenue

### Control of communicable diseases

Summary of statement under vital statistics relating to  
    communicable diseases  
Incidence of the various communicable diseases by months  
    for as many years as figures are available  
Notification  
Investigation  
Isolation  
Quarantine  
Disinfection  
Immunization  
Special measures

### Health Education

What has been done

### Hospital facilities

Number of hospitals and dispensaries  
Location  
Wards, beds, paying beds  
Proportion of bed to population  
Operating room  
Types of operation done  
Maternity beds  
Extent to which maternity beds are used  
Water supply, disposal of excreta  
Cleanliness  
Bugs, flies  
Staff—doctors, nurses, attendants, midwives, apothecary,  
    steward, labourers  
Laboratory facilities  
Provision for communicable diseases  
Cases treated, indoor, outdoor, average for five years by  
    months  
Special hospitals

### Doctors available

Government  
Private  
How located ?

### Nurses and trained midwives

Government  
Private  
How located ?

### Laws and by-laws relating to Public Health

    Their deficiency and recommendations for improving them

### Unofficial health and welfare organizations

Names  
Work done  
How supported. &c. .

## 9. Summary

## 10. Recommendations

All available information should be obtained from people who have carried out work in the area as from the Superintendent, Anti-Malaria Campaigns, with reference to malaria ; from the Superintendent, Ankylostomiasis Campaigns, with reference to ankylostomiasis (treatments given, egg count, &c.) ; from the School Medical Officer for figures in relation to hygiene ; from the Provincial Surgeon regarding vaccination.

Information with regard to population and vital statistics could be obtained from the census reports and reports of the Registrar-General.

Each section and sub-section should deal with findings ; then there should be a discussion on the findings followed by recommendations.

A summary at the end will be useful.

The report should be illustrated by graphs and maps. Suitable photographs will add to the interest of the report.

If estates come within the area, figures relating to them under statistics should be given separately if available.

When a detailed survey has been carried out as in a Health Unit, the findings can be incorporated under appropriate sections as well as altogether at the end of the report. Survey forms are available for homes, schools, estates, tea kiosks, bakeries, dairies, and sundry boutiques.

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## APPENDIX 8 (b)

### OUTLINE OF A SANITARY SURVEY OF A SANITARY INSPECTOR'S AREA

#### *Area.*

Name ; location ; extent in Square miles ; boundaries and sub-divisions.

Topography: hills, valleys, plains, elevation.

Geology : topsoil, subsoil, special features.

Hydrography : rivers, streams, lakes.

Vegetation : animal life.

Use of land and use of water.

Roads ; communications : bus, railway, postal, telegraphic.

Rainfall.

#### *People.*

The following tabulated statement should be prepared :—

<i>Names of villages</i>	<i>No. of dwellings</i>	<i>Population</i>

The number of dwellings and population could be given according to the last census ; or according to information that could be obtained from the headmen for the current year. If the two are available, give both.

Density of population ; Industries and occupation ; Religion ; Education ; Central and Local Government.

*Water Supply.*

Sources of Supply : wells, springs, tanks, streams, rainwater, private, public, piped.

Protection from pollution.

Adequacy.

*Note.*—Standard aimed at is a protected well per hamlet.

Arrangements for boiling of drinking water. Number of villages and percentage of houses in each village doing this.

After a survey prepare a statement showing villages, the hamlets into which each village is divisible, whether these hamlets have each a protected well for its use, and if no well, suggest means of providing one to such hamlets.

<i>Names of Villages</i>	<i>Names of hamlets in each Village</i>	<i>Is protected well available in hamlets</i>	<i>If no well available, location of one and how it can be provided</i>

*Drainage.*

Disposal of rainwater, sullage water, other liquids. If bazaar or town area are cement front drains provided ? are back drains provided ? are back pavements associated ? If provided, state lengths in feet.

Are there proper outlets to drains ? Any nuisances due to lack of drainage ?

*Disposal of refuse.*

In towns ; in rural areas.

How stored in the home. How collected in towns.

Disposal : Dumping, filling, incineration, composting ; manure pits in rural areas. Any nuisances ?

*Disposal of Human Excreta.*

Types of latrines in area. Are they in accordance with departmental specifications ? Procedure adopted in getting latrines built. How are squatting plates provided ? Number of moulds available, their condition, adequacy. Are plates turned out satisfactory ? Any health leagues assisting in work ? If work has already been done, is a proper system in vogue ?

(1) Programme ; (2) Latrine Register ; (3) Latrine sketch map book ; (4) Statement by villages ; (5) Chart to show monthly construction and cumulative chart to show annual construction ; (6) Diagrammatic representation by squares of progress of latrine construction by villages and wasamas or equivalent areas.

Are above correctly maintained ?

Make a statement of present state of latrine construction in area :

<i>Name of village</i>	<i>Number of dwellings</i>	<i>Number with sanitary latrines</i>	<i>P. C. with sanitary latrines</i>

Discussion : At what rate are latrines being provided ? At this rate, when will whole area be completed ? What *difficulties* are being met with ? How do you propose to surmount these, &c.?

Prepare programme of work to enable whole area to be completed within reasonable time :

Name of village	Number of dwellings	Number with Sanitary Latrines	Number to be provided	1940		1941	
				Pro-posed	Cons-tructed	Pro-posed	Cons-tructed

In case of bucket latrines, method of disposal.

*Disposal of the Dead.*

What facilities are available in area ? Cemeteries and burial grounds—registered or not ; cremation ; are facilities adequate ?

*Housing.*

In urban areas, application of Housing Ordinance.

In rural areas: types of dwellings ; their construction ; lighting and ventilation ; maintenance ; cleanliness of dwellings and surroundings ; proximity to swamps and streams ; tethering of cattle ; location of kitchen, &c.

*Food Sanitation.*

General remarks on Nutrition and Food of the people : milk supply ; meat supply ; fish supply ; vegetable supply ; markets ; fairs ; bakeries ; tea-kiosks ; eating-houses ; sundry boutiques.

Each of the above places should be inspected, condition and defects for correction noted.

*Control of animals.*

Dogs, rats, flies and mosquitoes.

*Miscellaneous Items and Offensive Trades.*

Laundries, bathing places, &c.

Offensive Trades : List them, state what control is exercised and what nuisances are created.

*Rural Sanitation Scheme.*

How many villages have been taken up ? What has been the response ? What progress has been made ? Are correct records being maintained ?

(a) Register (items to be entered in latrine register)

(b) Individual village summary—

Name of Village :

Number of dwellings:

Population :

Date of commencement of work :

Items	Jan.	Feb.	Mar.	Apr.	May	Jun.	Jul.	Aug.	Sep.	Oct.	Nov.	Dec.
Latrines ..												
Windows to houses												
Bolled water ..												
Manure pit ..												
Kitchen garden ..												

(c) Diagrammatic representation.

Control of Communicable Diseases.

What diseases are prevalent in area ?

Make statement of incidence for as many years for which figures are available.

Disease	1935	1936	1937	1938	1939	1940
Chickenpox						
Mumps						
Measles						
&c.						

Take up diseases that show special incidence and study them by months, e.g.

Chickenpox

	1935	1936	1937	1938
January ..				
February ..				
March ..				
&c.				

Discuss : Notification ; Investigation ; Isolation ; Quarantine ; Immunization ; Special measures.

*Malaria.*—Incidence ; Spleen rates if available ; Breeding places of *A. culicifacies* ; Arrangements for control. Map showing rivers and streams. D. D. T. spraying programme.

Hook-worm treatment : Prevalence of hook-worm ; Any egg counts done ; Number of annual treatments given during preceding years ; Has competency certificate been obtained ? Programme.

Vaccinations : Who does it ? Is Sanitary Assistant qualified ? Programme of work.

*Maternity and Child Welfare.*—State if any work is being carried out in area.

*School Sanitation.*—Carry out survey of schools in area using special form for the purpose ; tabulate findings and discuss ; make recommendations and prepare programme of work.

*Health Education.*—What is being done ? Is there a programme ? Is it effective ? Does it reach the whole population ? Prepare suitable programme according to needs of area.

*Health Administration.*—Public Health Authority in area ; Local Health Organization ; Hospital and Dispensary facilities ; Public Health Nurses and Midwives ; Unofficial health and welfare organizations :—

Names ;

Work done ;

How supported.

Summary.

*Recommendations and programme of work.*—In writing report each subject should be dealt with under 3 heads :—

(a) Findings ;

(b) Discussion ;

(c) Recommendation.

The purpose of this survey is to enable a programme of work to be prepared. The programme should be prepared in detail as that will be the guide to the Sanitary Inspector's work and work done in accordance with it will be the record of his achievement.



APPENDIX 9

MDF. 192.

APPRAISAL FORM FOR AREA OF M. O. H

The Medical Officers of Health should be asked to score and the D. M. S. S. (Health) should check them on their inspections.

2. The marks for staff should be given only when the full staff was available. In cases where certain items are not applicable to any area, the marks allotted to the particular activity should be omitted from the total and the percentage of marks scored should be marked on the basis of the deducted total.

Name of Unit .....

<i>Full Score</i>		<i>Scored</i>				
		<i>19—.</i>	<i>19—.</i>	<i>19—.</i>	<i>19—.</i>	<i>19—.</i>
Administration	50					
Vital Statistics	75					
Communicable diseases	250					
Maternity and Childwelfare	125					
School Health Work	125					
Food Control	80					
Sanitation	200					
Laboratory	20					
Health Education	75					
Total	1,000					

N.B.—(1) No credit will be given, unless specifically mentioned, to an execution of work below the standard specified.

(2) In scoring the Unit, add marks for administration. In scoring the efficiency of officers, omit marks for administration.

(3) The marks for anti-malaria work, anti-parangi work, maternity homes, fairs and festivals, should be omitted in computing the percentage, both for efficiency of Unit and efficiency of officers, in areas where these are not applicable.

ADMINISTRATION—50

		<i>Full Score</i>	<i>Scored</i>
A.—Medical Officer of Health	..	10	
(1) Full time, D. P. H.	..	10	
(2) Full time, D. T. M. & H.	..	5	
(3) M. O. H.	..	5	
1. B.—Sanitary Inspectors	..	6	
(1) One per 8,000 of population	..	6	
(2) One per over 8,000 of population	..	3	
2. C.—Public Health Nurses	..	6	
(1) One per 8,000 of population	..	6	
(2) One per over 8,000 of population	..	3	
3. D.—Midwives	..	6	
(1) One per 4,000 of population	..	6	
(2) One per over 4,000 of population	..	3	
E.—Other medical personnel	..	5	
(1) Assistant Medical Officer of Health	..	3	
(2) Clinic Medical Officer (Part time)	..	2	
F.—Clerical assistance	..	5	
(1) Full time clerk	..	5	
G.—Minor employees	..	7	
(1) Peon	..	1	
(2) Disinfecting orderly	..	1	
(3) Office labourer	..	1	
4.    (4) In case of L. AA's areas, scavenging and conservancy labourers—			
1 per 500 of population	..	4	
1 per over 500 of population	..	2	
H.—Necessary by-laws	..	5	
Total		50	

# VITAL STATISTICS—75

	Full Score	Scored
A.—Births ..	6	
(1) Tabulation monthly ..	3	
(2) Tabulation by sex, race and locality ..	3	
B.—Deaths ..	8	
(1) Tabulation monthly ..	3	
(2) Tabulation by cause, age, sex, race and locality ..	5	
(3) Investigation of deaths ..	10	
Infant—5 per month ..	4	
Maternal—2 per month ..	4	
General ..	2	
(4) Infant deaths tabulated by cause and standard age groups ..	4	
(5) Puerperal deaths tabulated by cause and kind of obstetrical care ..	4	
(6) Deaths from problem communicable diseases classified by months, age, sex, race and locality ..	5	
(7) Graphs prepared for exhibits ..	8	
(a) General death rate—		
Total—Urban—Rural ..	4	
(b) Maternal death rate—		
Total—Urban—Rural ..	2	
(c) Infant death rate—		
Total—Urban—Rural ..	2	
(8) Spot map of maternal and infant deaths ..	3	
(9) Board for morbidity and mortality statistics of area ..	3	
C.—Miscellaneous		
(1) Public health statistics ..	3	
(2) Standard maps ..	5	
(3) Standard charts and statements ..	5	
(4) Reports : On approved forms ..	3	
Promptness ..	2	
(5) Planning of work ..	3	
(6) Carrying out of plan ..	3	
Total ..	75	

## COMMUNICABLE DISEASES—250

A.—Reporting ..	15
(1) Typhoid fever—	
At least 5 cases per death ..	5
4 cases per death ..	3
3 cases per death ..	2
Less than 3 cases per death ..	0
(2) Dysentery—	
At least 5 cases per death ..	5
4 cases per death ..	3
3 cases per death ..	2
Less than 3 cases per death ..	0
(3) Other diseases	
Measles, chickenpox, whooping cough, mumps ..	5
B.—Investigation	5
(1) Completeness ..	3
(2) Accuracy ..	2

	Full Score	Scored
C.—Recording and filing ..	15	
(1) Filing geographically and chronologically for each disease ..	3	
(2) Spot maps—		
(a) Total ..	2	
(b) Current ..	2	
(3) Chronological chart of cases		
(a) by months .. ..	2	
(b) by years .. ..	2	
(4) Statement of cases and deaths by weeks, months, quarters and years ..	2	
(5) Cumulative chart for Typhoid and Dysentery .. ..	2	
D.—Control and immunization ..	10	
(1) Placarding ..	3	
(2) Concurrent disinfection	3	
(3) Hospitalization—		
Typhoid 10% of cases	4	
(4) Vaccination	15	
(a) Anti-typhoid—		
5 per case reported ..	5	
3 per case reported ..	3	
less than 3 per case ..		
(b) Anti-smallpox		
95% of births ..	10	
75% of births ..	7	
less than 75% ..	0	
(5) Rabies .. ..	3	
(a) Stray dog catching and destruction ..	2	
(b) Dog pound .. ..	1	
(6) Tuberculosis .. ..	15	
(a) Every case reported examined by M. O. H. .. ..	5	
(b) At least 2 visits per month per case registered ..	4	
(c) At least 3 contacts examined per new case .. ..	3	
(d) Contacts examined half-yearly ..	3	
(7) Diphtheria ..	7	
(a) Investigation of cases	3	
(b) Investigation of carriers	4	
(8) Malaria—		
Incidence (Registers and charts) ..	5	
Malaria register .. ..	3	
Charts showing morbidity statistics	2	
Investigation .. ..	35	
Malaria observation stations ..	3	
Subsidiary stations ..	2	
*Malaria surveys .. ..	25	
Special investigations ..	5	
*A complete malaria survey of at least one palata to be done every year		
Propaganda .. ..	20	
12 lectures per year	4	
48 school talks per year	4	
48 village talks per year	2	
Malaria week ..	10	

	Full score	Scored
Control .. ..	40	
A.—Epidemic .. ..	10	
Organization of river oiling ..	5	
Organization of treatment facilities ..	2	
Organization of distribution of medical comforts ..	2	
Organization of relief centres ..	1	
B.—Endemic .. ..	30	
(Anti-larval measures 10, Anti-adult measures 8, special health measures 7, and Report 5)		
(9) Hook-worm treatment ..	25	
25% of total population treated ..	20	
15% do. ..	10	
10% do. ..	5	
Below 10% treated ..	0	
50% of registered ante-natal mothers treated ..	5	
25% do. ..	3	
Less than 25% of registered ante-natal mothers treated ..	0	
(10) Leprosy ..	10	
(1) (a) Home visits—Cases		
4 visits per case per year by S. I. ..	2	
2 visits per case per year by M.O.H.	2	
Contacts—		
2 visits per contact per year by S.I.	1	
(b) Clinics—		
30 visits per treated case per year..	2	
(c) Records—		
Records and returns by S. I. ..	1	
Annual return by M. O. H. ..	1	
Half yearly return by M. O. H. ..	1	
(11) Parangi .. ..	10	
Survey ..	2	
Clinics ..	2	
Full treatment ..	2	
Half yearly examination of cases ..	1	
Half yearly examination of contacts ..	1	
Returns ..	1	
Records ..	1	
(12) Venereal diseases ..	10	
Propaganda ..	2	
Clinics ..	3	
Treatment of cases ..	3	
Follow-up work ..	2	
(13) Special studies ..	10	
Total ..	250	—
MATERNITY AND CHILD WELFARE—125		
A.—Maternity Hygiene .. ..	68	
(1) Mothers under care :		
75% of total births ..	6	
50% of total births ..	3	
Less than 50% ..	0	

	Full Score	Scored
(2) Pre-natal visits :		
At least 5 home visits per registered mother .. ..	6	
Free pre-natal clinics available .. ..	5	
At least 5 clinics visits per registered mother .. ..	6	
At least 90% of registered mothers attending clinics .. ..	5	
(3) Deliveries by health unit midwives :		
At least 60% of births	6	
At least 40% of births	3	
Less than 40% .. ..	0	
100% of deliveries verified	4	
(4) Deliveries at hospitals		
At least 5% of births	4	
(5) Maternity homes .. ..	13	
Maintenance of buildings	3	
Maintenance of premises	2	
Deliveries .. ..	6	
180 per annum .. ..	6	
150 per annum .. ..	4	
100 per annum .. ..	2	
Less than 100 .. ..	0	
Health education .. ..	2	
(6) Post partum visits		
At least 10 visits per case	6	
At least 7 visits per case	4	
Less than 7 visits	0	
(7) Urine examination		
At least 10 per case	7	
At least 7 per case	4	
Less than 7 .. ..	0	
B.—Infant hygiene .. ..	36	
(1) Infants under care 90% of births	8	
(2) Free clinics available .. ..	6	
(3) Visits to clinics		
At least 12 visits per live birth .. ..	8	
At least 8 visits .. ..	6	
Less than 8 visits .. ..	0	
(4) At least 90% of registered infants attending clinics .. ..	6	
(5) Home visits		
At least 10 visits per live birth	8	
At least 7 visits .. ..	6	
Less than 7 visits .. ..	0	
C.—Preschool hygiene .. ..	10	
(1) 3 home visits per registered preschool child .. ..	5	
(2) 4 clinic visits per registered preschool child .. ..	5	
D.—Child welfare organizations available for 100% clinics .. ..	6	
E.—Attention to minor ailments at 100% clinics	5	
Total .. ..	125	



## SCHOOL HEALTH WORK—125

		Full Score	Scored
A.—Survey		5	
Done	3		
Tabulated	2		
B.—Sanitation		20	
(1) Buildings inspected ..	2		
Half-yearly by M. O. H.	1		
Monthly by S. I.	1		
(2) Latrines and urinals ..	8		
Latrines: 90% of schools provided..	4		
Latrines: 70% provided	2		
Less than 70% ..	0		
Urinals: 90% provided	4		
Urinals: 70% provided	2		
Less than 70% ..	0		
(3) Safe drinking water			
In at least 90% of schools	3		
In at least 70% ..	2		
Less than 70% ..	0		
(4) Seats and desks of approved type—			
In at least 90% of schools	4		
In at least 70% of schools	2		
less than 70% of schools	0		
(5) (5) Playground—			
available in 90% of schools	3		
available in 70% of schools	2		
less than 70% of schools	0		
C.—Medical Inspection—		20	
Examination of the 3 groups (to 1st, 4th & 7th)			
90% examined ..	20		
70% examined ..	15		
less than 70% ..	0		
D.—Correction of defects—		25	
(1) Defects tabulated and copy given to teacher	3		
(2) Parents informed ..	2		
(3) Defects found corrected—			
At least 90% ..	15		
At least 75% ..	10		
At least 50% ..	7		
less than 50% ..	0		
(4) School clinics held at least twice a month..	5		
E.—Control of communicable diseases		25	
(1) Routine reporting by head teachers in at			
least 90% of schools	3		
70% of schools	2		
less than 70% of schools	0		
(2) Visits by S.I. to children notified—			
At least 90% ..	5		
At least 70% ..	3		
less than 70% ..	0		
(3) Anti-smallpox vaccination—			
100% vaccinated ..	5		
90% vaccinated ..	3		
less than 90% ..	0		
(4) Anti-typhoid inoculation—			
30% of children inoculated	6		
(5) Hook-worm treatment—			
At least 50% treated	6		
At least 30% treated	2		
Less than 30% ..	0		
F.—Health Education		30	
(1) Complete Scheme of Health Education			
Procedures in at least 10 schools per year	20		
(2) Complete Scheme of Health Instruction in			
at least 5 schools per year ..	10		
Total ..		125	

FOOD CONTROL—80			Full Score	Score
A.—Food inspection—				
(1) Meat inspection ..	..	..	10	
(a) Inspection of cattle and goats ..	..	3		
(b) Exposure in pound ..	..	2		
(c) Supervision of slaughtering ..	..	2		
(d) Stamping of meat ..	..	1		
(e) Zinc-lined covered cart for removal of meat ..	..	2		
(2) Markets ..	..	..	6	
Daily inspection ..	..	3		
Observation of by-laws ..	..	3		
(3) Inspection of bakeries, tea-kiosks, and eating-houses ..	..	..	27	
(a) by score card ..	..	7		
(b) by other methods ..	..	4		
3 inspections per month to each establishment ..	..	7		
Inspection of food handlers ..	..	5		
Defects found corrected—				
80% ..	..	8		
70% ..	..	5		
50% ..	..	2		
less than 50% ..	..	0		
(4) Dairies ..	..	..	27	
(a) Inspection of milk handlers ..	..	7		
(b) Complying with by-laws in regard to construction, equipment and methods—				
100% ..	..	12		
80% ..	..	8		
less than 80% ..	..	0		
(c) Sampling—3 samples per 1,000 population ..	..	8		
B.—Licensing ..	..	..	5	
Licensing of butchers, tea-kiosks, eating-houses, dairies, milk vendors 100% ..	..	5		
C.—Other measures ..	..	..	5	
(1) Protection of food exposed for sale from flies ..	..	5		
Total ..			80	
SANITATION—200				
A.—Sanitary inspection ..	..	..	30	
(1) 300 inspections per 1,000 of population ..	..	15		
200 inspections ..	..	10		
less than 200 ..	..	0		
(2) Defects found corrected—				
80% ..	..	10		
50% ..	..	7		
less than 50% ..	..	0		
(3) Passing and inspection of new buildings ..	..	5		
B.—Water supply ..	..	..	25	
Protected water supplies available to—				
100% of hamlets ..	..	25		
80% of hamlets ..	..	20		
60% of hamlets ..	..	15		
40% of hamlets ..	..	10		
less than 40% ..	..	0		
C.—Disposal of excreta ..	..	..	60	
(1) Proper records regarding progress of latrine construction ..	..	5		
(2) Per cent. of houses with sanitary latrines—				
90% ..	..	20		
70% ..	..	15		
40% ..	..	10		
less than 40% ..	..	0		
(3) Maintenance of latrines ..	..	10		
(4) Public latrines—				
1 set per 1,000 of population ..	..	10		
Adequately kept clean ..	..	5		
(5) Conservancy work in towns ..	..	10		

		Full Score	Scored
D.—Disposal of refuse ..		20	
(1) Scavenging in towns—			
Storage ..	5		
Collection ..	5		
Disposal ..	5		
(2) Labourers for rural bazaar area	5		
E.—Anti-fly measures ..		5	
F.—Anti-plague measures ..		20	
(1) Adequate provision of grain stores ..	5		
(2) Provision of approved grain bins ..	5		
(3) All food handling establishments rat-proofed in terms of anti-plague regulations—100% ..	5		
70% ..	2		
less than 70% ..	0		
(4) Periodical cleaning sets ..	3		
(5) Rat campaigns ..	2		
G.—Rural Scheme of Sanitation ..		30	
100 houses per S.I. complying with the scheme fully ..	30		
50 houses per S. I. complying with the scheme fully ..	20		
H.—Fairs and festivals ..		10	
(1) With all sanitary requirements ..	5		
(2) Maintenance ..	5		
	Total ..	200	
LABORATORY—20			
A.—Facilities ..		5	
Adequate space and equipment available for simple processes only ..	5		
B.—Examination of specimens (locally and centrally) ..		15	
(1) At least 60 specimens per 1,000 of population of faeces, urine, blood, smears, sputum, &c. ..	10		
(2) Water samples from public supplies monthly ..	5		
	Total ..	20	
HEALTH EDUCATION—75			
A.—Lectures ..		15	
(1) With lantern 2 per month	5		
(2) Without lantern 1 per month	5		
(3) With cinema 3 per year ..	5		
(exclusive lectures on Malaria)			
B.—Talks ..		15	
(1) Village, 4 per month per Sanitary Inspector	5		
(2) School, 4 per month per Sanitary Inspector	5		
(3) Clinic, 1 per clinic held ..	5		
C.—Health and Baby exhibitions one per year		15	
D.—Estimated attendance			
10% of population yearly ..	10	10	
E.—Little mothers' classes ..		20	
(1) In connection with each centre held regularly ..	10		
(2) In girls' schools—			
100% ..	10		
80% ..	8		
less than 80% ..	0		
	Total ..	75	

## APPENDIX 10

### GENERAL OUTLINE OF ANNUAL REPORTS OF HEALTH UNITS

*Please read carefully*

The annual reports of Health Units, which should reach the Office of the Director of Medical and Sanitary Services by the 31st of January, should follow this outline.

One copy of the report should be sent to this office. A copy each should also be forwarded to the Chairman of the Local Authority and the Assistant Government Agent or the Government Agent of the area.

1. Title page.
2. Letter of transmittal.
3. Contents.
4. List of tables—

This list refers to the tables contained in the report.

5. List of maps and charts—

- (1) A map of the Island showing the position of area and its relation to a few important places.
- (2) A detail map of the Health Unit area showing location of child welfare centres, of hospitals and dispensaries, of midwives, of nurses, of Sanitary Inspectors, &c.
- (3) Spot maps showing location (a) of notified cases of typhoid and dysentery, (b) of other communicable diseases.
- (4) Any other map to indicate other matters of interest.

#### Charts—

These will be used to illustrate the figures and to drive home what they represent more forcibly.

6. List of photographs—

Photographs of interest should be used to illustrate the report. The picture should have a human appeal; small groups of people doing something are preferable to photographs without some sort of human activity, such as large groups specially posed for the occasion.

7. List of annexures—

As all figures contained in this report will be the total of those supplied monthly and quarterly during the year, one annexure should be the statistics for each quarter and total for year under the monthly report headings.

8. Table of contents.

9. Members of the Unit—

State the names, qualifications, duration of service, &c., of each, how disposed, additions, transfers, &c.,

10. Summary of year's work—

This will be a summary of the report that will follow. It is better to place it in this position rather than at the end. Often busy people who are not inclined to read the whole report would like a summary, and if they are interested by the latter they may read the report itself.

11. Section A : Introduction—

*Very brief* description of the area, general features, general condition of the population, chief occupation of the inhabitants, industries, size of the area, its subdivisions, its population, religion, education, climate, roads, local authorities in area, &c. Acknowledgment to persons and organizations for assistance rendered. Co-operation. How Health Unit work is being received. Community organizations in area; use made of them and assistance rendered by them.

- 
- (1) B. Number of specimens.  
Population.
  - (2) A. Number of lantern lectures.  
Number of lectures without lantern.  
Number of cinema shows.
  - (3) B. Number of Sanitary Inspectors.  
Number of village talks.  
Number of school talks.  
Number of clinics held.  
Number of clinic talks.
  - (4) E 2. Number of Girls' Schools.  
Number in which little mothers' classes are held.



Section B : Administration—

(1) Vital statistics.

Comment on defects in the system of registration and collection of vital statistics and suggest means of improvement.

(a) Population.

Estimated mid-year (July 1st) population for the year under review and, where available, give population for nine previous years.

Classify the population by areas : urban, rural, estate ;

by race, age, sex, and represent them as percentages.

Urban is considered by the Registrar-General as meaning the population of the thirty-seven proclaimed towns.

(b) Births.

Total births ;

Births tabulated by areas : urban, rural, estate ;

by race, sex, and months.

Give figures for previous years.

Birth rate per 1,000 of population for the year and for nine years previously, if possible.

Birth rate for the year under review

by area : urban, rural, estate ;

by race : if information is available, also give figures for previous years.

(c) Deaths.

Total deaths ;

Deaths during the year tabulated by

areas : urban, rural, estate ;

race ;

age groups. Make special mention of deaths

under 1 year ;

1 to 2 years ;

2 to 5 years.

Give figures for previous years.

Death rates per 1,000 of population for the year, and for nine previous years if possible.

Death rate for the year under review

by areas : urban, rural, estates ;

race ;

age, if available.

Give rates for previous years as well.

Principal causes of deaths by ages and numbers due to each. All the communicable diseases should be included. Each cause for which there is an unusual number of deaths should be discussed in as great a detail as possible.

(d) Infant mortality.

Number of infant deaths

by months ;

by areas : urban, rural, estate.

Give figures for previous years.

The percentage of the total deaths that they form. Infant mortality for the year, and for nine previous years if available.

Statement relating to infant mortality among children under care.

Infant mortality rate for the year under review

by areas: urban, rural, estate ;

by race.

Give figures for previous years.

Infant mortality by ages and causes

under 1 week

1 week to 1 month

1 month to 3 months

3 months to 6 months

6 months to 9 months

9 months to 12 months.

Findings of investigation of infant deaths.

(e) Stillbirths (for urban areas only).

Total number

by race ;

by months ;

proportion per 1,000 living births.

Give figures for previous years.



(f) Maternal mortality.

Number of deaths at child-birth  
by areas : urban, rural, estate ;  
by race ;  
by age.

Death rate per 1,000 living births.  
Causes of maternal deaths.  
Give figures for previous years as well.  
Findings of investigation of maternal deaths.

- (g) Specific death rates for communicable diseases and the principal causes per 100,000 of population.  
If this is dealt with under control of communicable diseases it could be left out here.  
Statistics for the year under review should always be compared with those of previous years for the different activities.

(2) Health Education.

Subject	Lectures with Lantern	Lectures without Lantern	Lectures with Cinema	School talks	Village talks	Total	Estimated Attendance

Health weeks, exhibits, leaflets, press article, &c.  
New features in health education.

(3) Special problems and research.

- (4) Ordinances and by-laws.  
State where they are deficient, what is required, and what has been done to make good the deficiencies.

(5) Prosecutions.

If any entered, reasons and results.

Nature of Offence	Number		Results
	Urban	Rural	

Section C : Control of Communicable Diseases—

Number of notifications made by different members of the public as doctors, ayurvedic physicians, headmen, householders, sanitary inspectors. The number of postcards issued and the number returned. Compare with previous years. Cases and deaths from each of the communicable diseases for the year and for previous years. Cases and deaths from each of the communicable diseases for the year arranged by months.

Death rate per 100,000 of population for the year for each of the chief communicable diseases.

Case mortality for each of the chief communicable diseases, bearing in mind that all cases are not reported.

Cases and deaths arranged  
by areas : urban, rural, estate ;  
age, sex, and race.

Deal with each disease separately and discuss prevalence, methods of control, possible sources of infection, modes of transmission, use of laboratory diagnosis, average length of isolation, secondary cases ; distinguish as to residence of the cases and place where disease was contracted, i.e., separate locally contracted cases of residents, cases of residents contracted out of town, and imported cases of non-residents. State these in figures and do not be satisfied with a general statement.

State method of disinfection, name of disinfectant or disinfectants and quantities and strengths used. Determine whether employment of the trained men to do the actual work of terminal infection has any bearing on the spread of infection.

In the case of pulmonary tuberculosis state number of contacts under observation for periodical physical examination.

Spot map.

The following are useful headings for epidemiological studies :—

1. Diagnosis. Clinical, serological, bacteriological.
2. Prevalence. History of outbreak  
Incidence in time of cases  
Chronological chart of cases  
Total cases and deaths.
3. Distribution. Spot map.  
By sex, age, race, occupation.
4. Source of infection.
5. Mode of transmission.
6. Discussion.

Laboratory Diagnosis.

State facilities available in area and in Health Unit Office.

How much work was done locally and how much in Colombo.

The extent to which private practitioners have utilized health unit facilities.

Statement of work done by months

Nature of specimen	Total	Jan.	Feb.	Mar.	&c.

Work done

Nature of specimen	Locally	In Colombo

Results of examination

Nature of specimen	Positive	Negative	Total
Faeces A. D. ..			
A. L. ..			
T. D. ..			
A. D. & A. L. ..			
Urine for albumen ..			
Sputum for T. B. ..			
Blood for widal ..			
,, for malaria, &c. ..			

Hook-worm infestation.

Examination and treatment.

Period during which this was done.

Difficulties experienced, knowledge gained, accidents, how work was carried out, who assisted, &c.

Results of examination before and after treatment.

Number examined  
Number positive  
Percentage positive  
Number egg counted  
Number of eggs  
Egg count per gramme.

Treatment.

Population  
Number examined  
Number treated.

Tabulate population into Urban  
Rural

Estate; and each again into adults and children

Vaccination against smallpox.

Period when it was done  
Procedure  
Discuss method employed—number of insertions  
Percentage of insertions successful  
Age grouping of those vaccinated  
Primary  
Secondary  
Results  
Percentage of primary to births.

Area	No. vaccinated	No. successful	Per-centage successful	No. un-successful	Per-centage un-successful	No. unknown	Per-centage unknown
Urban							
Rural							
Estate							
Total							

Vaccination against typhoid.

Discuss this under typhoid fever.

Area	1st dose	2nd dose	Total

Malaria investigation and control.

What is the situation ?  
Investigation.                      Splenic index  
   Parasite index  
   Morbidity statistics  
   Anopheline survey.

Splenic Index

School	No. Examined	No. Positive	P.	1	2	3

P : Palpable  
1 : Palpable    1 finger breadth  
2 :    "        2    "    "  
3 :    "        3    "    "

Breeding Places

Breeding Places	No. Examined	No. Positive	Specimens Found

Quinine distribution  
Tuberculosis control  
Domiciliary care :  
Leprosy control  
Other work

Section D : Hygiene—

Maternity, infant, and pre-school hygiene. Organization of work. Health centres. Little mothers' classes. Work of social service leagues, assistance given by the public. Milk distribution. Loan closet, pre-natal and maternity work. Infant and pre-school work. Clinics. Home visits. Work of public health nurses. Work of midwives. Hospital accommodation for maternity cases. Research into maternal and infant deaths. Cost of child welfare work.

Statistics.

A.—Clinics.

Name of centre	Date established	No. of clinics held during year	Attendance								
			Expectant mothers			Infants			Pre-school children		
			First	Subsequent	Total	First	Subsequent	Total	First	Subsequent	Total
Totals ..											

Visits to Clinics.

Name of centre	Number on register			Percentage on register visiting clinics			No. of visits by			Visits per		
	Expectant mothers	Infants	Pre-school children	Expectant mothers	Infants	Pre-school children	Expectant mothers	Infants	Pre-school children	Expectant mothers	Infants	Pre-school children
Totals ..												

B.—Home visits.

Home visiting by nurses.  
Number of nurses  
Total homes visited  
Number of homes visited per nurse  
Total home visits  
Number of visits per nurse.

	Urban	Rural	Estate	Total
Expectant mothers—				
First visits ..				
Subsequent visits ..				
Total ..				
Infants—				
First visits ..				
Subsequent visits ..				
Total ..				
Pre-school children—				
First visits ..				
Subsequent visits ..				
Total ..				

Statement showing number home-visited. Total number of visits and visits per individual.

	Urban	Rural	Estate	Total
Visits during pregnancy—				
Number visited ..				
Number of visits ..				
Visits per mother ..				
Visits during puerperium—				
Number visited ..				
Number of visits ..				
Visits per mother ..				
Visits to infants—				
Number visited ..				
Number of visits ..				
Visits per infant ..				
Visits to pre-school children—				
Number visited ..				
Number of visits ..				
Visits per child ..				

Midwives work—

- Number of midwives.
- How located.
- Remarks as to how their work could be improved.
- Irregularities found in the work of midwives.
- Number of expectant mothers under care.
- Carried over from last year.
- Added this year.
- Confined.
- Remaining.
- Total mothers looked after during year.
- Total ante-natal visits.
- Visits per mother.
- Total births.
- Number conducted by Health Unit midwives.
- Per cent. of births attended by Health Unit midwives.
- Number of confinements conducted by each midwife per year and per month.
- Total visits paid after confinement.
- Visits per confined mother.
- Brief statement as to work done by each midwife in tabular form.

Name of midwife	Mothers registered	Mothers confined		Total ante-natal visits	Visits per mother	Total post-natal visits	Visits per mother	Registered mothers taken to clinics		Urine samples examined	
		Per year	Per month					Number	Per cent. of pre-register	Total	Pct mother



## School health work—

### School sanitation.

Number of schools in the area.

Classification of schools :

Primary, Junior secondary, Senior secondary, Collegiate.

Boys, Girls, Mixed.

Denomination.

Government, Government-aided, private.

School population.

Total, Boys, Girls.

Routine of work.

Personnel available.

Findings of school survey. Compare it with previous year's findings.

Sanitation.

Make mention of cementing of floor, proper seats and desks, water supply and storage, latrine and urinal accommodation.

Year by year show by figures progress made.

Medical inspection of school children.

Procedure, time per child, does anybody assist.

Findings at medical inspection.

Correction of defects.

Facilities for correction. Central clinics.

Local school clinics. Use of 606 form.

In relation to medical inspection and correction of defects, make return of work done in terms of school forms 1 and 2.

Classify defects found and give details as to number found, percentage of total, number corrected, percentage corrected.

Comment on each of the more common defects and action taken to deal with them.

Comment on work done at local school clinics and central school clinics and how corrections can be improved and increased.

Make special mention of Vitamin A deficiency, the different manifestations of it, number of each manifestation found, age and sex grouping, action taken to correct and results.

Type of deficiency.

Number.

Treatment.

Number corrected.

Percentage correct.

Control of communicable diseases.

Number of schools reporting regularly on postcard.

Total children so notified.

Number inspected by Sanitary Inspectors.

Number found to be infectious.

Nature of diseases found.

Nature of disease.

Number of children.

Anti-typhoid inoculation.

Anti-smallpox vaccination.

Hook-worm treatment.

Malaria prophylaxis and treatment.

Health education.

Number of schools completely carrying it out.

Number of schools partially carrying it out.

Compare figures with previous years.

List items of health education and state against each item number of schools carrying it out completely in all classes and number carrying it out partially.

## Section E : Sanitation—

Statistics relating to each section as given in monthly and quarterly reports should be summarized for the year.

### (1) Water supplies.

Source, nature, sufficiency, wholesomeness, freedom from risks of pollution samples analysed, their results, and action taken.

Plans for provision of water to rural areas.

Water in relation to disease.

Wells—protection from pollution, use of pumps.

Statistics of work done as given in monthly reports.

(2) Disposal of excreta.

Public, private, and school latrines and urinals as to construction, maintenance and use, method of disposal, progress of latrine construction and the present state in the area. Defects and suggestions for improvement. Statistics of work done as given in the monthly reports and quarterly reports.

(3) Disposal of refuse.

Storage, collection, disposal, defects, organization, suggestions for improvement.

(4) Drainage.

State of drainage of area.

Sufficiency.

Defects, suggestions for improvement.

(5) Food sanitation.

Food handling establishments, tea kiosks, eating-houses, bakeries, aerated water manufactories, &c., discuss each separately as to how far they conform to by-laws.

Milk supply.

Discuss this fully. Licensing, character and wholesomeness of milk produced.

Adulteration, condition of dairies and cowsheds re construction, equipment and methods.

Samples examined—results and action taken to improve supply.

Give results of examination in tabular form stating name of vendor or dairy.

Markets.

Meat, fish, vegetables ; meat inspection, method of keeping of cattle by butchers, statistics given in monthly reports of inspection, defects, &c.

(6) Housing.

Statistics of work done as recorded in monthly and quarterly reports.

House-to-house inspection.

Open spaces and dwellings.

Cleanliness of surroundings.

Action taken to improve buildings.

Lighting and ventilation.

(7) Nuisances.

Any reported or detected.

Nature.

Action taken.

Noxious trades.

(8) Animals and insects.

Mosquitoes, houseflies, rats, dogs ; their relation to public health. Their prevalence and action taken to deal with them.

Location of breeding places and dealing with them.

Rat flea survey findings.

Anti-plague measures.

Section F : Financial Statement—

According to form sent out with circular relating to quarterly reports.

Work out per capita cost.

Section G : Conclusions and Recommendations.

Section H : Programme of work for following year—

Care should be taken to report fully and explicitly on the influences affecting or threatening to affect injuriously the public health of the district and on the action which has been taken or which may still be needed with a view to control those influences. It is of especial importance that the Medical Officer of Health should record what action has been taken to remedy unhealthy conditions which have been reported in previous annual reports or in special reports presented during the year under review and that attention should be called afresh year by year to such as remain unremedied.

## APPENDIX 11 (a)

### NOTES ON THE SAMPLING OF WATER FOR PUBLIC SUPPLIES

The sanitary quality of a water is not judged entirely upon its physical characteristics. A water may be clear and sparkling and yet be dangerously contaminated. A water may not be necessarily unsafe if it has a disagreeable odour, taste or appearance such as may be due to colour or turbidity which although unattractive for human consumption, may often have little or no sanitary significance.

It may be regarded as bad from a chemical point of view and yet be free from pathogenic organisms. The type of contamination which renders the water unsafe can rarely be indicated by taste, smell or appearance. The danger of water causing specific water-borne diseases occurs almost invariably when water contains human wastes.

The recognized standard tests for the determination of the presence or absence of germs of the *B. Coli* group do not attempt to determine any specific disease producing bacteria as *B. Coli* though not disease-producing in themselves are bacteria whose natural habitat is the intestines.

It may reasonably be assumed that if *B. Coli* are found in a series of samples of water taken from the same source that there are avenues open for the contamination of the water by sewage, in which case disease bacteria may be present at any time.

It is not common practice to search for specific disease-producing bacteria as in many cases this would be impracticable.

Persons entrusted with the duty of water sampling should take such precautions as will ensure that all samples shall be truly representative of the water upon which an opinion is required as to its quality.

It is known from experience that in many cases the simplest although most important instructions are not followed in the taking of samples either through ignorance or carelessness, with the result that waters may be condemned owing to an unfavourable analysis. It is hoped that a few notes regarding the procedure of sampling may assist those responsible for sampling in obtaining better results generally.

In the first place it is rarely necessary to take samples for bacteriological analyses from sources which are obviously liable to be contaminated, except for some special reason. It is also waste of time for all concerned if the fullest information regarding the source surrounding and precise point of sampling does not accompany the samples.

The sanitary quality of a water supply cannot be finally passed by a field inspection alone. If, however, an inspection shows that apparently no possibility whatsoever exists for pollution gaining entrance to the source, it may reasonably be considered as yielding a safe water. But this should be confirmed by bacteriological analyses. Pollution by animals, although undesirable and objectionable, is rarely dangerous, the significant question being whether opportunity exists for access of human wastes.

It is not always possible for those experienced in water supply development to decide from a field inspection as to the possibilities of pollution especially by underground pollution; and it is more often impossible for persons untrained in this work to make such decisions, in such cases analyses are specially valuable.

Some sources can be condemned on the basis of field inspection with the aid of analyses; and, except in rare cases, final conclusions cannot be based entirely on the analyses.

It is clearly more rational that an inspection of a source be first made by an experienced person before time and expense are incurred in obtaining chemical and bacteriological samples. Time and again samples have been submitted for analysis from sources which could not at a reasonable cost be suitably developed for a public supply.

A single analysis of a water may be most misleading owing to intermittent contamination or careless sampling, and a definite opinion regarding the sanitary quality of a water should therefore not be expected upon a single sample.

A good analysis in itself proves only that contamination probably did not exist at the time that particular sample was collected, but the only useful opinion is that upon the possibilities of contamination at other times.

### COLLECTING AND HANDLING SAMPLES

*For Chemical Analysis.*—The sample should be obtained in a clean well-fitting glass-stoppered bottle about  $\frac{1}{2}$  gallon in capacity.

It is always advisable to thoroughly rinse out the bottle at least twice with the water to be sampled prior to taking the actual sample. The bottle should be nearly filled leaving only a small bubble of air for expansion. To protect the mouth of the bottle in transit a piece of clean linen or clean strong paper should be tied down over the stopper. No sealing wax or paraffin should be used.



Samples should not be taken long before they are to be dispatched. The quicker they are in the hands of the analyst after collection, the more accurate the result will be. When samples are obtained by hand the hands should be kept as far away as possible from the neck of the bottle and on no account should the water come in contact with the hands.

*Samples from Built Wells.*—Samples from open wells should be taken only after baling or pumping out at least part of the water originally present in the well and thus allow a fresh supply of ground water to flow in. The whole bottle should be placed well under the surface of the water by attaching it tightly to a rod if necessary and the stopper then removed whilst under water by means of a clean string. This method prevents the inclusion of floating matter. For wells in constant use pumping or baling may be dispensed with. When obtaining a sample from a pump or tap the nozzle should be examined to see that it is clean and water run to waste for a few minutes.

*Samples from Tube Wells.*—Tube wells or trial borings should be pumped for at least 15 minutes before a sample of water can be considered representative for analysis. A longer period of pumping is preferable.

*Samples from Springs.*—Water from springs may be contaminated by surface or shallow ground contamination as it issues from the ground. They should be surrounded by water tight curbing to divert surface and shallow ground water or temporarily by means of drains, a day or so before the samples are taken in localities which indicate that this possibility exists.

The bottle should where possible be placed well under water as in the case for sampling from built wells; the neck of the bottle should be directed upstream.

*Samples from Concrete or Metal Cisterns.*—These are rarely required as the sample is usually required of the inflowing water. The proper cleanliness and water tightness of cisterns should first be examined.

Defects should be remedied before any samples are taken for analysis.

*Samples from Streams and Ponds.*—Samples are required for comparison before and after filtration and sterilization. Their quality will vary greatly with seasonal conditions and the amount of possible sources of contamination on the drainage area. Samples are also required to ascertain the character of treatment most suitable. Sample bottle should be held below water and moved almost horizontally in a direction away from the hands in the case of ponds, and for streams as in the case of springs. Special care must be exercised in the selection of the sampling point to obtain a representative sample.

*Samples from Reservoirs.*—Samples should be taken as for ponds beneath the surface near to and just above the main outlet and, if possible, one also near the point of entry.

*Samples from Pipe Lines.*—Samples should be taken from standpipes well removed from dead ends after allowing the water to run full bore for 2 to 3 minutes at least. Nozzles should be examined before running off the water, and drip from faulty connections avoided. Nozzles should not be washed before taking samples.

*For Bacteriological Analysis.*—Special precautions must be observed when taking samples for bacteriological analysis to prevent the slightest risk of contamination from other sources. The special apparatus using a 250 cc. sterilized bottle delivered in an ice containing case is used for the purpose. Wash the hands before handling the bottle and always hold the bottle with the fingers near the bottom. Wherever possible the whole sampling apparatus should be lowered to the point where the sample is to be collected and the stopper opened by means of the cord provided for the purpose for the bottle to fill. Lowering the cord will then close the bottle. In case where due to shallowness of the water it is not practicable to use the special apparatus, the sample will have to be collected direct by hand. Always hold the bottle with fingers near the bottom.

On no account must the hands come in contact with the inside of stopper. The stopper and cap should be removed at one time and the stopper held in the left hand by the cap. No rinsing out of the bottle is to be done nor must the stopper be laid down during the process of sampling. Samples should be dispatched to the laboratory as quickly as possible after taking and the container kept stocked with ice during transit.

The case should not be opened or the cover and stopper removed until the point at which the sample is to be taken has been decided upon and the method of taking this sample is thoroughly understood by the person sampling. Removal of stopper should be done at the moment of sampling.

*Samples from Built Wells.*—Place the sterilized bottle in the sampling apparatus and lower the whole at least a foot below the water and pull the cord thus opening the bottle. When filled, lower the stopper and lift apparatus out.

A little water should be shaken out to allow an air bubble below stopper and the bottle closed and the stopper covered with clean paper and tied down.

*Samples from Tube Wells.*—Samples to be taken from pump nozzle after 15 minutes pumping. Nozzle of pump to be flamed with cotton wool and methylated spirit until nozzle is hot before commencing the pumping. The nozzle should then not be washed or touched by the hands.

*Samples from Service Taps.*—Nozzle of tap to be flamed with cotton wool and methylated spirit until nozzle is hot. Open tap and run water for two or three minutes and then collect sample. The nozzle should not be washed or touched by hand before or during sampling.

*Samples from Springs.*—As in the case of chemical samples.

*Samples from Cisterns.*—As in the case of chemical analysis for tube wells.

*Samples from Streams and Ponds.*—As in the case of chemical analysis for ponds and streams.

*Samples from Reservoirs.*—As in the case of chemical analysis for ponds.

*Samples from Pipe Lines.*—As in the case for tube wells. As it is essential that the examination is commenced as soon as possible after the collection of the water, arrangements must be made for the sample to reach the Bacteriological Institute not later than 3 p.m. (Samples of water are not received for ordinary bacteriological examination on Saturdays, Sundays, or Government Holidays.)

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## APPENDIX 11 (b)

### STANDARDS OF PURITY OF DRINKING WATER RECOMMENDED BY THE COMMITTEE OF THE SOCIETY OF MEDICAL OFFICERS OF HEALTH OF CEYLON, 1932

#### *Physical Standards—*

- (1) Water should have a transparency of not less than eight turbidometer degrees, i.e., a vanishing depth of a platinum wire 1 mm. in diameter of not less than 3 feet,
- (2) It should be free from visible suspended matter.
- (3) It should be free from taste and odour.

#### *Chemical Standards—*

- (1) A source should not be developed as a public supply without treatment if the total hardness exceeds twenty parts per 100,000.
- (2) The salinity should not exceed fifty parts of chloride expressed as chlorine per 100,000.
- (3) Free Ammonia should not exceed 0.006 per 100,000.
- (4) Albuminoid Ammonia should not exceed 0.015 per 100,000 in the water as delivered to the consumer.
- (5) Nitrites and Nitrates should not be present unless they can be accounted for as due to causes other than pollution.
- (6) Iron should not exceed 0.05 per 100,000.
- (7) Water should be free from lead.
- (8) The PH value should not be below 6.

#### *Bacteriological Standard—*

- (1) It should be free from pathogenic organisms.
- (2) No faecal *B. coli* should be present in 10 cc. or smaller quantities. (The examiner in reporting results will make allowance for random distribution.)

Faecal type of *B. coli* should be defined as a lactose fermenting, gram negative, non-sporeing bacillus capable of growing freely in a one p.c. bile salt broth, of giving a positive methyl red reaction and/or indol reaction and/or no growth in Koser's citrate mixture.

- (3) Total count should be less than 500 per cc. on agar at 37° for 48 hours.

Where chlorination is used as a means of purification a higher standard of bacteriological purity should usually be obtained.



## APPENDIX 12

### MEMORANDUM ON HOOKWORM AND ROUNDWORM TREATMENT

*(For the use of Government Medical Officers, Apothecaries, and Estate Dispensers)*

#### INTRODUCTION

The permanent control of Hookworm Disease will be gained through the establishment of sanitation, which, unfortunately, will require a long time to accomplish. In the meantime, temporary control can be secured by instituting mass treatment at periodic intervals with Tetrachlorethylene, a drug which can be safely administered. Treatment should be regularly given at Government hospitals and dispensaries, Mandapam Camp, institutions under the care of Government Medical Officers, health clinics, schools, villages and estates, under the supervision of Medical Officers and Apothecaries.

Children over ten should be treated for Ankylostomiasis with Tetrachlorethylene in maximum doses. Children under ten, could be treated for roundworm infestation with oil of Chenopodium in Castor Oil.

Children who have a double infestation should first be treated for roundworm, and on a subsequent occasion treated for Hookworm with Tetrachlorethylene.

#### EXAMINATION

Before administering a drug in any instance, the patient should be examined and prescribed for by a medical officer or apothecary. In the case of an estate not employing a registered medical practitioner, a Government Medical Officer or a Government Apothecary should prescribe and will be made available. The examination should consist of :—

- (a) Inspection of the general appearance of the patient as to nutrition and swelling of extremities ;
- (b) Examination of heart with stethoscope ;
- (c) Questions regarding medical history (present and recent illnesses) ;
- (d) Inquiry as to nature of last meal.

#### TREATMENT

The drugs used in treatment, the dosage to be prescribed and the methods recommended are described in the dosage tables. The doses recommended are for those who are in apparent good health as are the large majority of the people concerned, and the dosage should be adhered to. Weak and ill-nourished people should receive reduced doses.

To increase the safety and effectiveness of treatment the following procedure is suggested :—

- (a) each centre of treatment should be visited by the Medical Officer each day ;
- (b) every person to be treated should be examined and prescribed for ;
- (c) doses should be measured accurately with the minim glass ;
- (d) patients should be kept at the place of treatment till bowels have moved and should be instructed that no bath be taken on that day ;
- (e) purgative should be repeated if bowels have not moved within 3 hours ;
- (f) those treated should be instructed as to the symptoms which require the attention of the Medical Officer, and where the Medical Officer, Anky. Dispenser or the Sanitary Inspector could be found, if required.

*Note.*—The taking of a light morning meal or a cup of tea with sugar or jaggery, on the day of treatment is advisable.

The following should not be treated :—

- (1) Children under 2 years ;
- (2) Persons suffering from acute febrile diseases, or obviously in poor physical condition.

If, however, such patients need treatment, they should be directed to the nearest hospital where the following procedure is advisable :—

- (a) rest in bed for 2 days with full hospital diet principally carbohydrates, and tonics as needed ;
- (b) physical examination including examination of urine ;
- (c) administration of anthelmintics on a subsequent day, the dose to be based on dosage table and patient's condition ;
- (d) repetition of treatment if necessary in 2—4 weeks the patient being permitted to go home in the meantime, 48—72 hours after treatment.

*Note.*—If there is organic disease, the doctor should use his judgment about administering treatment.

## DIETARY DIRECTIONS FOR MASS TREATMENT

- (a) No preliminary fasting on previous day.
- (b) Full carbohydrate diet the previous evening.
- (c) A light morning meal or a cup of plain tea with sugar or jaggery on the day of treatment.
- (d) Hot tea with sugar or jaggery half an hour after anthelmintic ; it may be repeated.
- (e) Midday meal after the bowels have moved—plenty of rice-congee, barley and sugar, malted milk.
- (f) Evening meal—light rice meal with “sodi” and vegetables.

## ESTATE TREATMENTS

Estates which are carrying out mass treatment campaigns with estate dispensers should have the services of a Government Medical Officer or Apothecary-in-charge for examining the people and prescribing the dosage. Mass treatment can be carried out by estate dispensers who have certificates of competency, but under the supervision of a Government Medical Officer or Apothecary-in-charge.

To get the best results it would be advisable to treat each estate or group of estates within as short a period as possible.

## AFTER TREATMENT CARE:

Even when proper doses are administered, untoward symptoms sometimes arise in those treated. In order to deal with such situations, notes on the action of the drugs used, symptoms of poisoning and their treatment, are given below.

## TETRACHLORETHYLENE

Tetrachlorethylene is absorbed little, if at all, from the intestinal tract. If fat is present, or if enormous doses of the drug are given, absorption may take place, producing toxic symptoms. These symptoms are due to an overdose of a hypnotic and are not secondary to those of liver damage, as in the case of carbon tetrachloride.

Alcohol is not a contra-indication to the use of the drug.

In animals no true necrosis of the liver or kidney takes place with a dose up to stomach capacity.

Tetrachlorethylene is a volatile substance, and dizziness and faintness do sometimes occur after administration as after any other volatile anaesthetic, but this condition should be distinguished from intoxication.

No extreme dietary precautions are necessary. The avoidance of fat or meat 12 to 24 hours after dosing would probably be desirable. If fat is taken one runs the risk of mental and nervous disturbances, and therefore the drug should not be given in castor oil.

No fatalities have been reported after the use of Tetrachlorethylene.

If any unpleasant symptoms, such as dizziness, faintness, nausea, hallucinations occur :—

- (1) Put patient to bed ; keep him awake.
- (2) Evacuate bowels by enema or purgative.
- (3) Try stomach lavage.
- (4) Give symptomatic treatment and feed patient.

Normal pregnancy is no contra-indication to treatment with Tetrachlorethylene. Dosage :—Half to one-and-half drachms.

As there is a possibility of the decomposition of the drug when exposed to light air and high temperature, every fresh bottle must be tested by sight to see that no fumes are emitted, and by smell to see that there is no pungent irritant smell. Those emitting fumes or having an irritant smell should not be used but should be returned to the Civil Medical Stores.

## OIL OF CHENOPodium

The active principle of the oil of chenopodium is ascardiol and its toxic effect is principally upon the central nervous system. It also causes gastro-intestinal irritation.

Mixed with bile, oil of chenopodium is readily absorbed, hence it is best not to starve patients before treatment. Mixed with fats, its absorption is retarded. *In children under 10 years of age, it is best to administer the drug in castor oil.*

When a child is suffering from acute gastro-enteritis which is usually accompanied by vomiting, abdominal pain and sometimes purging, the child should not be treated for the worm infestation even if this is suspected. The gastro-enteritis vomiting and collapse should first be treated with such drugs as bicarbonate of soda, spirit. ammon aromat., glucose, adrenalin, small doses of magnesium sulphate, warmth, and bowel and rectal lavage if possible. When the acute stage is passed anthelmintic treatment could be given.

## SYMPTOMS OF POISONING

Symptoms may appear within 2 to 3 hours of administration, or may be delayed as much as 36 hours. The mild symptoms are headache, dizziness and vomiting, which are accentuated in serious cases. In fatal cases, stupor, coma and convulsions precede death.

## TREATMENT OF SYMPTOMS OF POISONING

Success depends solely on prompt measures undertaken at the very outset of the symptoms : such measures are :—

- (1) Immediate evacuation of bowels by copious and repeated soap enemas or a magnesium sulphate enema, and if possible by repetition of the purgative by mouth.
- (2) Stomach lavage, if feasible.
- (3) Warmth.
- (4) Control of vomiting which could be achieved by stomach lavage and by adrenalin—m.v. of a 1—1,000 solution in an ounce of water or glucose solution every hour till vomiting stops.
- (5) Hot drinks, such as coffee, rice-congee, barley water, glucose, malted milk. The more food the patient retains the better.
- (6) Patient should be kept awake.
- (7) Symptomatic treatment as indicated.

*Note.*—Alcohol should not be administered by mouth.

## GENERAL REMARKS

In renal, cardiac and hepatic diseases, oil of chenopodium is contra-indicated and other drugs should be used.

Insist on a good evening meal the day previous to treatment. Those treated should be kept under observation till everyone has had one or more free purges. Evacuation of the bowels should occur within three to four hours after treatment. The interval between treatments with oil of chenopodium should be at least 14 days.

## INDENTS FOR DRUGS FOR HOOKWORM TREATMENT

All officers carrying out worm treatment should provide themselves with the following equipment which could be obtained by requisition from the Civil Medical Stores :—

Tetrachlorethylene	Enema Syringe
Oil of Chenopodium	Drop bottles
Castor Oil	Measuring glasses
Epsom Salts	Hypodermic Syringe
Glucose	Camphor in oil
Stimulant Mixture	Digitalin
Carminative Mixture	Pituitrin
Bismuth and Soda Mixture	Adrenalin Solution
Mustard	

The subjoined approximate quantities are given as a guide in indenting for drugs for Hookworm Treatment.

- 1 lb. Tetrachlorethylene for 80 adults.
- 10 lb. Epsom Salts for 150 adults.
- 10 lb. Castor Oil for 150 children under 10 years of age.
- $\frac{1}{4}$  lb. Oil of Chenopodium for 350 children under 10 years of age.

## SCHOOL TREATMENT

Headmasters should be notified in advance of the probable dates of treatment and requested to inform the children and their parents and guardians.

Propaganda work in the school should be done with the permission of the headmaster. This should consist of lectures with the aid of charts, lantern or the cinema where available. Children should be informed of the date fixed for treatment which has been arranged with the headmaster, and requested to inform their parent, and guardians.

The lecturer should emphasize that :—

- (a) the children should take a good meal in the evening previous to the day of treatment ;
- (b) on the morning of the treatment day they should take a light meal, such as a cup of plain tea with sugar or jaggery or rice-congee ;
- (c) after treatment, they could take plain tea, congee water or barley water until the bowels have moved twice or three times ;
- (d) when the bowels have moved, they could partake of soft boiled rice with "molaguthanni" or "sodi" ;
- (e) on the day following the treatment, they could take their usual food.



Villagers should be encouraged to take treatment on days when treatment is administered at schools. The Anky. dispenser or the Sanitary Inspector should, on the day of the lecture, visit the houses of the villagers in the vicinity where treatment is to be carried out and carry out propaganda work with charts and specimens of worms. He should request them to come for treatment, informing them of the date, time and the place of treatment.

Before administering treatment, the Anky. dispenser or Sanitary Inspector should inquire from the children whether their parents or guardians are aware that treatment is being given to them.

DOSAGE TABLES

Be sure your Drugs are Chemically Pure —Test Tetrachlorethylene by smelling it

*The Civil Medical Stores stock tested and Safe Supplies*

In view of recent investigations in the treatment for the removal of hookworms and roundworms infestations, which the great majority of the people in Ceylon have, the following doses and methods of administration are recommended for routine use :—

A.—Treatment of Children under 10 Years of Age

Children 10 years and under are best treated for the double infestation with chenopodium in castor oil on the first occasion and with Tetrachlorethylene and salts on a subsequent occasion.

*Dosage Table in Minims*

For measurement, the minim glass should invariably be used.

<i>Apparent Age</i>		<i>Oil of Chenopodium</i>	<i>Apparent Age</i>	<i>Oil of Chenopodium</i>
2	..	1	7	5
3	..	2	8	5
4	..	3	9	6
5	..	4	10	6
6	..	4		

One treatment only should be given using the full dose mentioned administered in castor oil as the purge. Prompt purging is very necessary after administration of oil of chenopodium.

B.—Treatment of Hookworm Infestation with Tetrachlorethylene  
*Dosage Table in Minims*

For measurement, the minim glass should invariably be used.

<i>Apparent Age</i>	<i>Tetrachlorethylene</i>	<i>Apparent Age</i>	<i>Tetrachlorethylene</i>
2-12	.. 2 times the age in years	36-40	.. 30-60 minims
13-20	.. 3 " " " " "	41-50	.. 30-45 "
21-35	.. 35-60 minims	51-55	.. 20-30 "

The drug should be given in one dose in an efficient purge of magnesium sulphate solution.

*Magnesium Sulphate Solution :—*

One part of crystals of magnesium sulphate.  
Two parts of water.  
Maximum Dose—3½ ounce of the solution.

*Notes concerning Treatment of Ankylostomiasis*

- (1) By experiment and by practice tetrachlorethylene has been shown to be the best drug for removing hookworms, and oil of chenopodium an efficient drug for removing roundworms.
- (2) To get the best results the dosages recommended in the dosage tables should be administered, unless there are contra-indications.
- (3) The precautions mentioned and the type of people to be excluded should be observed.
- (4) If the morning meal is light and taken two hours previously, hookworm and ascaris treatment may be given with the expectation of obtaining satisfactory results.
- (5) Treatment should be given at the dispensary or other treatment place. Allowing the patient to take medicine home is not recommended.
- (6) In all cases, treatment may be repeated in two weeks with advantage. The need for subsequent treatments cannot be overstressed.

## COMPOSTING

## COMPOST-MAKING

Compost-making as undertaken by Public Health Officers is of two varieties. In the first, compost is made on a large scale utilizing street and domestic refuse together with human excreta in Towns which have organized Scavenging and Conservancy Services. By its very nature this form of compost-making is not suited for rural conditions, and, owing to aesthetic reasons, it is not availed of for the cultivation of food crops. This compost is, however, of definite value as a measure for permanent crops such as coconuts.

The procedure adopted in Ceylon for compost-making with town refuse and human excreta is as follows :—

A suitable area of land is selected. The soil should be hard and the surface even. There must be a good approach to it and a plentiful supply of water.

The town refuse as received at the site is sorted to remove broken pots, pans bottles, sticks, tins, coconut husks, stones, bricks, &c., and the remainder made up into a pile in the way road metal is piled by the road side, with the exception that the top of the pile is flat and does not come to a point.

These piles are arranged parallel to each other one for each day and one row for each week.

The piles are made up of the following dimensions : base 6 feet wide, height 4 feet and top 4 feet wide. The length of each pile will depend on the quantity of refuse collected each day.

A trench 2 feet wide and 2 feet deep extending the length of the pile is made by separating the refuse and in it is deposited a certain percentage of faecal material as collected from the latrines.

The total quantity of faecal material to be added is 25 per cent. by volume. The additions are made weekly and the total is added in three weeks. The following percentages have been found to be satisfactory : at beginning 10 per cent., end of first week 7 per cent., end of second week 5 per cent., and end of third week 3 per cent. of the original heap.

After the faeces have been deposited in the trench, it is covered over by bringing the separated refuse into position. It should be seen that the faeces added are not so much as to cause seepage through the dry refuse. The heap is then sprinkled over with water to moisten it.

Sprinkling with water is carried out daily so as to keep the material moist without in any way causing the faeces to ooze through.

At the end of a week the whole heap is thoroughly mixed up by turning the material over. For this purpose the pronged mamoty will be found useful. After mixing the heap is re-formed, 7 per cent. of fresh faecal material added, covered over, and heap moistened with water. In remaking the heap it is advisable to collect up the material found at the edge of the base of the pile and to deposit it in the centre so that any fly larvae found there would be killed by the temperature generated during the process of fermentation. At the end of the second week the heap is turned over and remade and fresh faecal material added, 5 per cent. by volume of the original heap. The heap is kept moist and the turning over is repeated at the end of the third week, when a final 3 per cent. of faecal material is added. After this, addition of faecal material is stopped but the weekly turning and daily moistening are kept up till three months are over when the material is available as manure.

The heaps should be systematically arranged so that heaps by weeks and by days of the week will be readily known. When the heap for the day has been prepared and the requisite quantity of faecal material has been added, the remainder of the collected faecal material during the commencement of the process may have to be trenched, but after the work has gone on for a week or two no trenching will be needed as all the faecal material on any day can, and should be used up by the heaps of the corresponding days of previous weeks, e.g. :—The process on Thursday of the fourth week will be as follows : the new heap for the day is made up, 10 per cent. by volume of faecal material is added and the heap is moistened with water. The Thursday's heap of the third week is turned over, 7 per cent. of faecal material is added and the heap is moistened. The Thursday's heap of the second week is turned over, 5 per cent. of the faecal material is added and heap is moistened. The Thursday's heap of the first week is turned over, 3 per cent. of faecal material is added and heap is moistened. Thus all the faecal material will be used up.

When faecal material is added fermentation is caused and consequently the temperature rises to 55°C. and over, which is sufficient to kill the germs of typhoid fever and dysentery, and the larvae of the hook-worm. The temperature rises for three weeks and then comes down but keeps above the air temperature.



Aeration of the heaps is very important and weekly turning of heaps aids very materially the process. Labour involved in turning the heaps becomes greater as the heaps increase in numbers. The turning of heaps, therefore, after the fourth week may be done once a fortnight. Placing a cover over heaps is not necessary. In fact it tends to retard the process. Sieving the finished product involves extra labour and adds to the cost of production and is not necessary. All that will be needed is the sorting out of stones, sticks, and such like articles.

A few doubtful hook-worm larvae per kilogramme of compost at the end of three months have been found, but not after five months. Further work on the subject is being carried out and till more information is obtained the three months old compost should be stored under cover and kept warm and dry for a further period of two months before it is disposed of.

The analysis of a typical sample has yielded the following results :—

		<i>Organic Material</i> <i>Per Cent.</i>	<i>Air-dried</i> <i>Per Cent.</i>
Moisture	..	46.60	6.7
Organic matter	..	7.00	29.8
Ash	..	36.40	63.5
Nitrogen	..	0.69	1.21
Potash	..	0.44	0.77
Phosphoric acid	..	0.47	0.82
Stones and foreign material		—	27.5

The Agricultural Chemist considers that Rs. 5 or Rs. 6 per ton for the compost is a fair price.

#### COMPOST-MAKING IN RURAL AREAS

In the rural areas compost-making is an individual activity. The materials used are kitchen waste and garden refuse together with any animal droppings that may be available. If dung is not available about one third of the total material to be composted should be green material. A good supply of green material can be obtained if a hedge of wild sunflower is established in every garden and holding. It can be frequently lopped and it will yield much green material which decays soon. If, however, wild sunflower is not available, any variety of green leaves may be used.

*Methods.*—There are two methods by which waste material can be composted—the trench and the heap—and one that is more suitable for the particular area should be adopted. The heap method is generally preferable except during dry months of the year when water is scarce, and also in times when there is no labour for turning the material in the heap.

The trench or the heap may be of any convenient length depending on the quantity of the material available, which should fill the trench or reach the correct height of the heap within about 10 days. There should be a series of at least four trenches or heaps, so that when one is completed another can be started. The trench should be 3 feet wide at the top and about 2 feet deep. The sides should be sloping and there should be a difference of about one foot between the width at the top and the bottom. There should also be a slope at the bottom of the trench from one end to the other so that rain water may not accumulate. The heap may be 3 feet wide and built to a height of 4 feet.

The waste materials should be collected daily and spread in thin layers in a sandwich form in which the bulky materials should alternate with layers of green material or dung, cattle urine, earth and ash. Cattle urine should be poured over the material, or if it is not available a mixture of fresh dung and water should be liberally sprinkled over the material. The packing of the different layers should be loose, otherwise a stick should be inserted through the heap and drawn out to provide ventilation holes and aeration for the organisms responsible for the breakdown processes of the material. If composting is already in progress, then it would be useful to add a small quantity of the material from the previous heap when it is about 15 days old as it contains some of the active organisms for the decomposition of the material.

At the end of two weeks the first heap should be turned over to constitute the second, and a fresh heap started in the original site. At the end of a further fortnight each heap would be turned over to constitute the next in the series, i.e., the second becomes the third, the first becomes the second and a new third, heap is started. The total number of heaps that will be required for four turns at fortnightly intervals would be four.

At the last turn the material should be restacked in the heap to a height of 4 feet. At each turn and whenever necessary, the material should be watered so that it keeps moist but not wet. As a protection against heavy and continuous rains and excessive drying from strong sun, a cadjan shed may be built over the trenches or heaps. The temperature of the material during the first fortnight should be

about 140° F which will be sufficiently high to destroy all weed seeds and grubs of flies and other insect pests. When the compost is fully made at the end of 3 months it should be used as soon as possible as otherwise there will be a loss of plant food, especially in the case of exposed heaps.

If labour is not available the trench or heap may be plastered with mud or with a paste of dung and soil so that other organisms which bring about decomposition of plant material in the absence of air may operate. In this case no turnings are necessary but the process is much slower and compost will not be ready for 6 to 9 months.

*Rate of Application.*—Compost should be applied about a fortnight before a crop is planted. The rate of application should be  $\frac{1}{2}$  to 1 lb. per sq. ft. of garden crops or 10 to 20 tons per acre for field crops. One cubic foot of compost weighs 40 to 50 lb., but the weight may vary considerably according to the moisture content of material.

## APPENDIX 14

### INSTRUCTIONS TO OFFICERS CARRYING OUT SCHOOL HEALTH WORK

#### *Area of Work—*

- (1) School health work should be carried out in the area assigned.

#### *Aim—*

- (2) It should be the aim to organize a good scheme of work which should embrace all the schools in the area assigned and which would be judged by results.

#### *What School Health Work includes—*

- (3) School health work should include—

- (a) Medical inspection of school children.
- (b) Correction of defects.
- (c) School sanitation.
- (d) Health education.
- (e) Control of communicable diseases.

- (4) Before commencing work in any area and at the beginning of each year to judge progress made a school health survey should be conducted. The form to be used in carrying out the survey is multigraphed and is available at the Head Office. It could be had on application.

#### *Medical Inspection—*

- (5) Medical inspection of each child should be carried out three times during his school career, namely, at entrance, in the 4th standard, and in the 7th standard. Form Medical 457 (Card) should be used and the nature of any defects found noted on the reverse of the card. This card should be kept at the school where filing facilities are provided and results of correction of defects recorded in it from time to time. Where facilities are not available it should be filed in the office of the School Medical Officer.

#### *Correction of Defects—*

- (6) All defects that can be corrected should be done by making use of existing facilities. For this purpose the defects should be tabulated in duplicate on form Medical 456, one copy being given to the head teacher or principal who should use his influence to get defects corrected. In the case of rural schools and where form Education C 76 is already in use, the duplicate for the head teacher or principal could be made out on it.

Whatever defects the School Medical Officer could correct himself he should do so, such defects being cases of non-vaccination, malaria, hook-worm, scabies, pediculosis, &c., by means of school clinics. All other defects should be referred to the nearest dispensary or private practitioner for treatment for which form Medical 606 should be used. Because there are no facilities available for dealing with enlarged tonsils, caries, and defects of vision, one should not bemoan this fact and leave alone defects that could be corrected.

#### *Notification of Defects to Parents—*

- (7) Parents or guardians of the scholars should be notified of the defects found and treatment advised on form Medical 354, which often could be filled up in the school itself with the aid of one of the teachers for despatch through the scholars themselves.

#### *School Sanitation—*

- (8) Each school should be inspected with regard to sanitation at least once every six months and defects found should be got corrected through the principal or manager of the school. Form Medical 410 should be filled in duplicate after each such inspection and one copy should be sent to the Divisional Inspector of Schools and the other retained by the officer himself.

#### *Health Education—*

- (9) By means of health education it is hoped to prevent defects occurring or recurring by inculcating into the child proper methods of living.



Health education in schools should be carried out as follows :—

(a) Health education procedures.

1. Daily morning inspection,
2. Scoring of health booklet,
3. Weighing and measuring,
4. Proper use of handkerchief,
5. Proper storage of drinking water,
6. Use of individual drinking cups,
7. Midday meal,
8. First-aid outfit,
9. Health log book,
10. Health clubs,
11. Organized play and games,
12. Proper disposal of refuse,
13. Pupil participation in :
  - (i) Morning inspections,
  - (ii) Maintenance of latrine and urinals,
  - (iii) Boiling and storage of drinking water,
  - (iv) Preparation and serving of midday meal,
  - (v) Cleaning of school buildings, furniture, and surroundings,
  - (vi) Disposal of refuse.
14. Parent-teacher association,
15. Parents' day
16. School health demonstrations,
17. Health amusement.

(b) Health instruction.

1. Direct teaching of hygiene, first-aid, and home nursing and mothercraft ;
2. Teaching of correlation ;
3. Visual methods : posters, scrap books, health magazines, &c.
4. Dramatization ;
5. Essay writing ;
6. Oral methods, songs, debates ;
7. Field visits to village homes, latrines, water supplies, food handling establishments, mosquito breeding places, M. O. H's office, S. I.'s office, office of local authority, child welfare clinics, dispensaries, and hospitals ;
8. Sanitary projects.

*Training Classes for Teachers—*

(10) The teacher is the person who should carry out health education in schools. It is therefore necessary to give the teacher a correct idea regarding health education and periodical classes for teachers in the area should be held using the departmental syllabus of lectures to teachers on health education in elementary schools till facilities for attending them have been provided for all the teachers in the area assigned.

(11) These courses of instruction should be arranged for through the Inspector of Schools of the area. It will be desirable to get together all the teachers from a few schools in a selected area rather than a few teachers each from many widely scattered schools to attend each course. By the former method health education could be commenced in all the forms in each of the schools.

(12) Once health education work has been commenced in any school it should be encouraged and maintained. It will be an advantage to have the work well started and going in one school in the area for others to see and follow.

*Training Schools—*

(13) If there is a teacher training school in the area the special course of lectures and demonstrations on health education should be given yearly according to the departmental syllabus and it should be seen that health education methods are adopted in the practising school associated with it.

*Periodical Conferences—*

(14) In association with the Inspector of Schools periodical conferences with the teachers undergoing and who have undergone the course on health education should be held to maintain their interest and to give each of them an opportunity to impart and to receive ideas with regard to the work.

### *Courses on Home Hygiene and Mother-craft for Lady Teachers—*

(15) In the case of girls' schools a course for lady teachers should be arranged on home hygiene and mother-craft. During the practice period of the course and after the older girls should be taught mother-craft. Arrangements should be made for teachers and senior girls to attend nearby child welfare clinics and assist in the work. Public health nurses and school nurses where available should assist the teachers with talks and demonstrations.

### *Advance Programmes—*

(16) Each School Medical Officer should prepare for the year a tentative advance programme of his work on the forms available for the purpose so that every school in his area will be included for whatever work is planned to be carried out in each of them.

From this programme he should prepare a school term and monthly advance programmes in greater detail. Copies of each of these programmes should be sent in duplicate to the D. M. S. by the 25th of the month preceding the period in question. The D. M. S. will forward one copy to the Head Office.

### *Quarterly Progress Reports—*

(17) The work of each school term should be reviewed and progress reports sent in not later than the 20th of the months of April and August. The contents of the report for the third school term could be included in the annual report which should be sent in by the 15th January. Copies of advance programmes and progress reports should be sent to the Divisional Inspector of Schools. The progress and annual reports should contain the tabulation of work done on forms 1 and 2.

### *Diaries—*

(18) School Medical Officer should send his diary at the end of each month to the D. M. S. who will peruse and return it to him. For this purpose the School Medical Officer should maintain two diaries for use in alternate months.

### *Hours of Work—*

(19) His hours of work are the same as for other Government officers but they may be altered to suit school hours. He should devote Mondays, Tuesdays, Wednesdays, Thursdays, and Fridays to school health work and utilize Saturdays exclusively for office work, interviews, &c. On certain afternoons school clinics for correction of defects should be developed.

### *Work during School Vacations—*

(20) During the April, August and December holidays arrangements should be made for work in schools that either close late or open early. Arrangements might be made to hold vacation classes for teachers on health education. School Medical Officers desiring to do post graduate work in Colombo that will be useful in connection with their school activities may do so by arrangement with the department.

### *Quinine Administration—*

(21) When quinine is administered in schools located in hyper-endemic areas, the record of the work should be kept on form Education C 9 (F\*) 6/30.

### *Latrines and Urinal Accommodation—*

(22) Every school should be provided with adequate latrine and urinal accommodation, the sites for which should be selected by the School Medical Officer or Medical Officer of Health in whose area the school is located.

For boys' as well as girls' schools the latrine seats should be at the rate of 1 per 75 children, associated with urinals at the rate of 10 feet (or four compartments) per 100 children. If the remaining children exceed 30 in number, an extra latrine seat should be provided.

In the case of mixed schools, the same proportion should be maintained for the two sexes and each set of latrines and urinals should be located as far apart as possible.

When a teacher is resident, a seat for him separate from those for the children should be provided.

(23) New latrines should be constructed in terms of the departmental memorandum on latrine construction, and departmental type plans. Pit latrines should be provided with cement concrete squatting platforms made in appropriate moulds. Where existing latrines do not conform to the requirements of the memorandum, every step should be taken to improve them. Ablution water in a metal or other container should be provided at the latrines. A cut oil barrel will serve the purpose well.



### *Water supply—*

(24) Every school should be provided with a protected water supply. Where one is not available on the premises the school should get its water from such a source in the neighbourhood. In any case, whether there is a well on the school premises or not, the water for the children should be boiled and stored in a wide-mouthed covered vessel provided with a tap for extracting water.

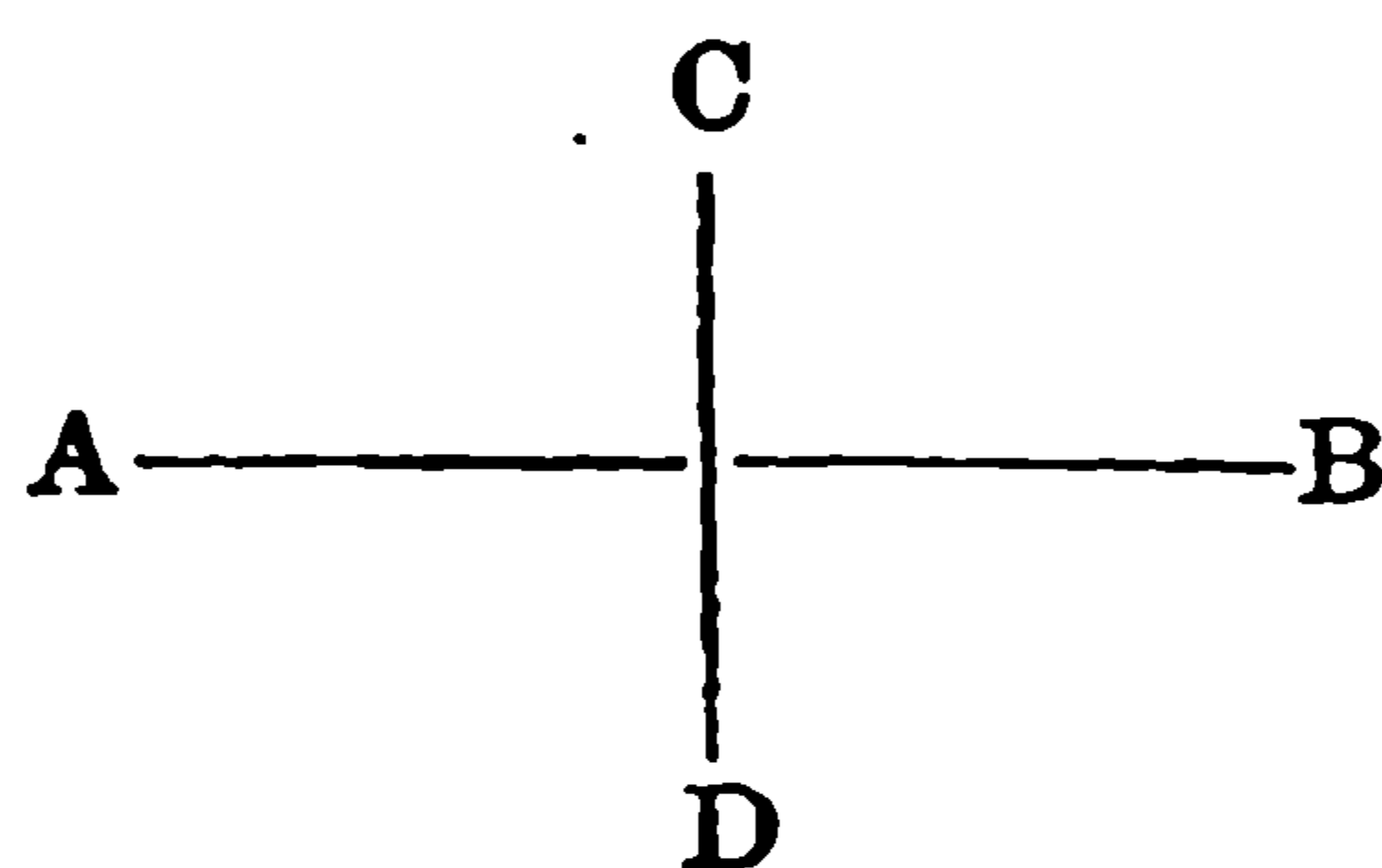
A suitable material to make the vessel of is galvanized iron. In some schools they have been made of cement. The vessel should be placed on a stand in the verandah or a spot accessible to all with a bucket below the tap to receive waste water; often a convenient place in rural schools is, where cement drains are provided, just under the eaves at the entrance to the class room so that the waste water will run away into the cement drain. For a school of 150 children, a vessel of 6-gallon capacity will suffice.

At the end of the day's work, the interior of the storage vessel should be cleaned and the water let out and freshly boiled water placed for use the following day. Water can be boiled in earthenware pots.

For drinking the water, individual drinking cups should be provided. For storing these cups, a small cupboard with hooks inside to hang them on will be necessary, the hooks and cups being numbered. One such cupboard will be needed for each class of over 30 children. In the case of schools in towns, a higher standard should be aimed at. For towns having running water, the installation of bubbling fountains is recommended in place of the storage tanks and individual drinking cups at the rate of one per 100 children.

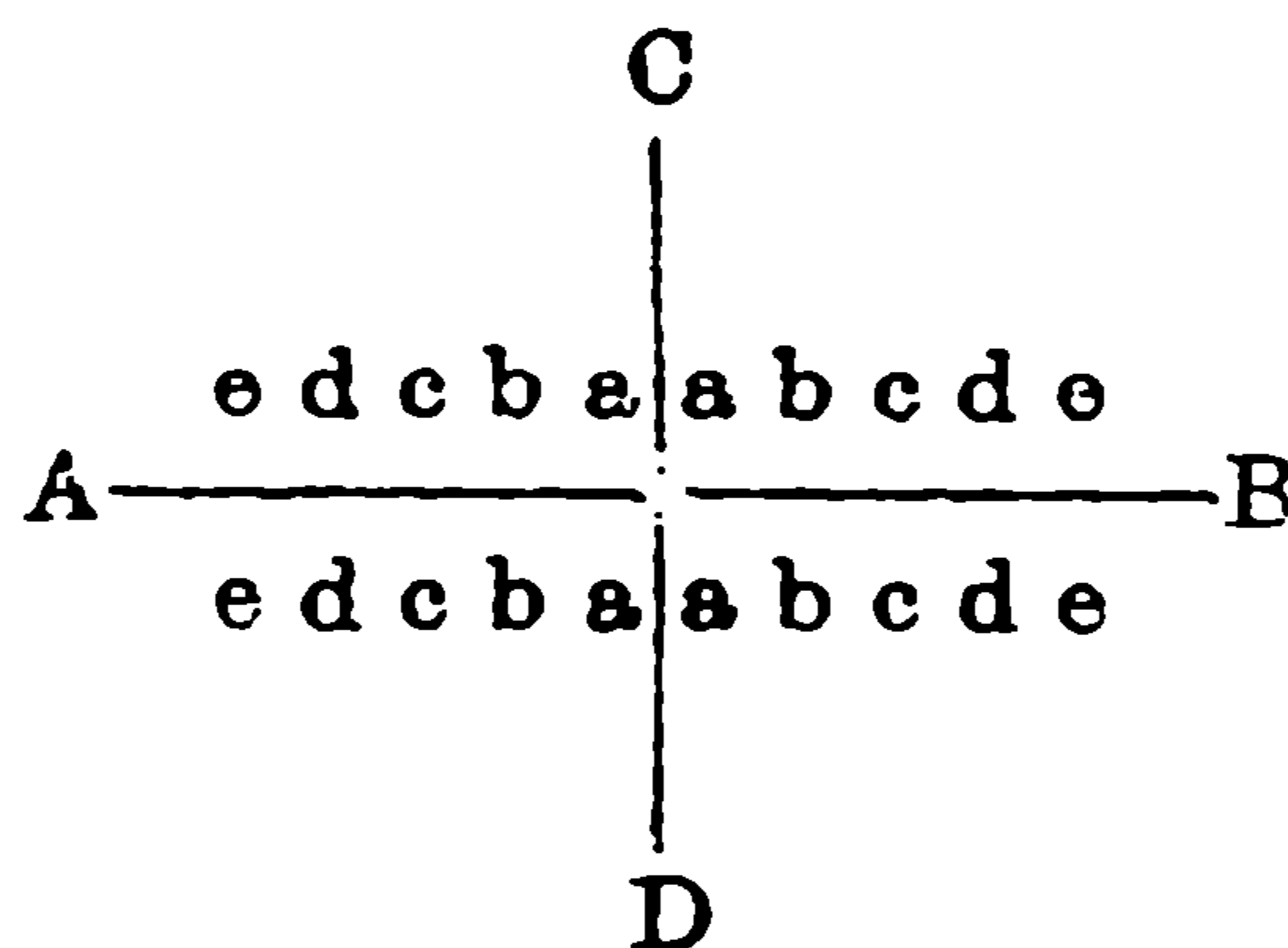
### *Method of recording Dental Condition at Medical Inspection—*

(25) A horizontal line A B divides the dentition into upper and lower jaws and a vertical line C D again divides each jaw into right and left. In the four spaces or angles the individual teeth are denoted.



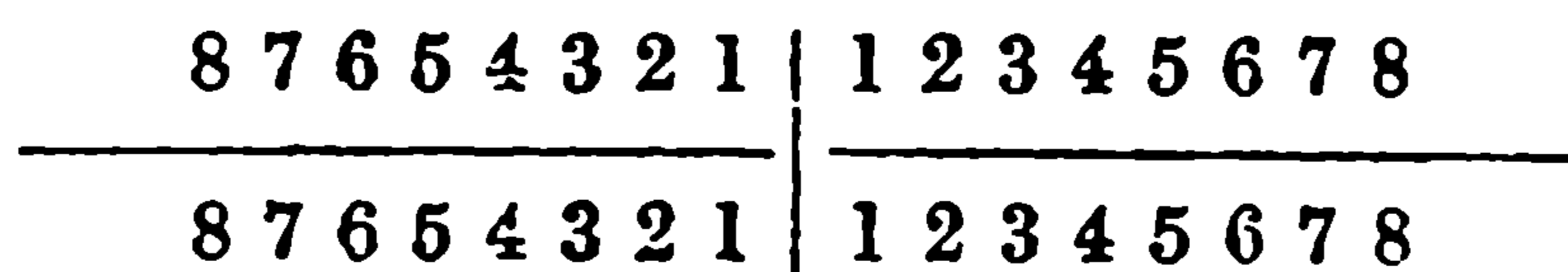
In recording the *MILK TEETH*—

Ordinary simple letters are used, e.g., a b c d e starting from the line C D.



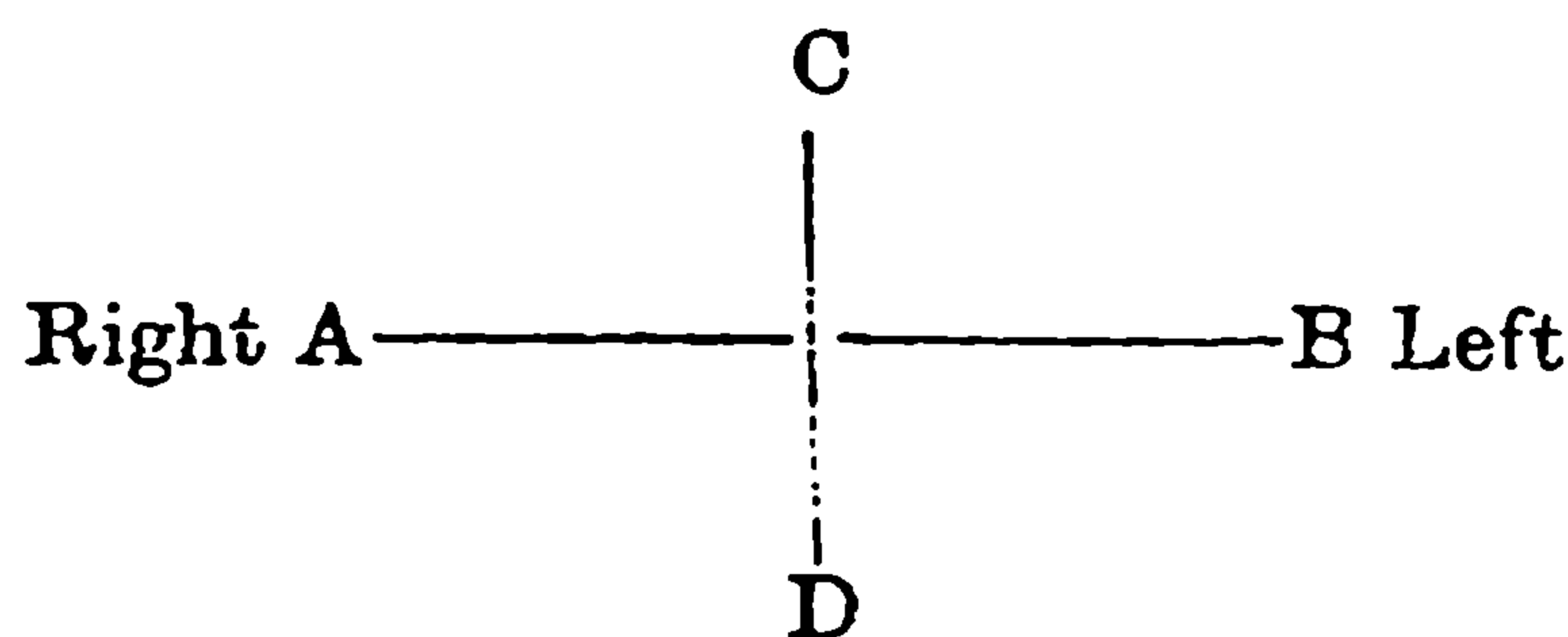
- a = Central incisor tooth.
- b = Lateral incisor tooth.
- c = Canine.
- d = 1st milk molar.
- e = 2nd milk molar.

In the recording of the *PERMANENT TEETH*, numerals are used, e.g.—



- 1 = Central incisor.
- 2 = Lateral incisor.
- 3 = Canine.
- 4 = 1st premolar or bicuspid.
- 5 = 2nd premolar or bicuspid.
- 6 = 1st molar.
- 7 = 2nd molar.
- 8 = 3rd molar.

The left hand side is the right of the patient (as patient faces you) and the right hand side is the left of the patient, e.g.—



It has been the practice in recording carious teeth to enter in the school inspection card D. C. 3 or D. C. 2 meaning that there are three carious teeth or two carious teeth (D. C. standing for dental caries) as the case may be. This is unsatisfactory as the individual tooth which is carious is not recorded and in subsequent inspections or follow-up examination the School Medical Officer frequently finds that one carious tooth has been shed and caries has started in another ; so it is not possible to find out if the teeth have had any attention at all. If the above method is made use of, the School Medical Officer could not only record the individual teeth which are affected but he could also record (roughly) the actual teeth which he considers should be extracted and also those which he thinks could be stopped by the dentist. A small cross, e.g., x, either above or below a letter or number denotes a tooth which the School Medical Officer considers should be extracted, e.g. :—

	d c		x x
			d e
6 e d			
x x			

Those without a x are the teeth which require conservative treatment (stopping). In the above diagram one indicates that the upper left 1st and 2nd milk molars

	x x
	d e
( ————— )	

require extraction, and also the right lower 2nd milk molar and the right lower 1st

permanent molar require removal (		
	6 e	
	x x	

The teeth left without a x are the upper right milk canine and the upper right milk molar which can be stopped.

Sometimes a milk tooth which should normally be shed is retained longer than it is necessary and so actually becomes a danger to the permanent tooth which has to succeed it.

On account of the retention of a milk tooth the permanent successor has no room in the normal dental arch and erupts outside the arch ; when this is noticed a small dot should be placed either above or below the letter showing that it is a retained milk tooth which needs extraction, e.g. :—

		.
		c
c b		a
..		.

Here the upper left milk canine, the lower left milk central incisor, the lower right milk canine and the lower right milk 2nd incisor are recorded as needing extraction.

(26) *Tartar or salivary calculus* is responsible for much damage (75 per cent. of extraction in adults is due to salivary calculus causing damage to dental tissues and causing pyorrhoea) to the soft dental tissues, e.g., gums, the lining membrane of the roots, and in some cases to the bone which forms the socket wall. The gums become unhealthy and a festoon of microscopic ulcers form along the free gingival margin causing much bleeding when the teeth are cleaned.

Special note should be made for the existence of tartar and when found should be recorded as follows :—

S. Calculus	+	(Slight)
S. Calculus	++	(Moderate)
S. Calculus	+++	(Severe)

Not infrequently one could see a carious tooth (e.g., in the right lower jaw) which is very painful on account of the exposure of the highly sensitive pulp. Here the patient throws out of action the right dental arch both upper and lower and masticates with only the left dentition, with the result that the right dentition, both lower and upper, gets thickly coated with tartar. Here, if the painful tooth is extracted and the patient encouraged to use the right jaws, the tartar will soon disappear.

On examining a child if dental caries or salivary calculus is found it should be recorded on the front of the individual record card against teeth and gums in accordance with the notations given at the bottom of the card. Then the card should be turned over and in the column "defects for treatment" should be recorded the details of dental caries and salivary calculus as mentioned above.

(27) Deciduous teeth—20.

	<i>Approximate dates of eruption of Baby Teeth</i>		<i>When they are shed</i>
<i>Eruption of the teeth—</i>			
Lower central incisors	..	6 to 9 months	.. 6 years
Upper central incisors	..	9 to 12 months	.. 8 years
Upper lateral incisors	..	9 to 12 months	..
Lower lateral incisors	..	12 to 15 months	.. 8 years
1st temporary molars	..	16 months	.. 9 years
Canine (slow eruption)	..	16 to 20 months	.. 11 years
2nd temporary molars	..	24 to 28 months	.. 10 years

Permanent teeth—32.

	<i>Approximate dates of eruption of Permanent Teeth</i>	
1st permanent molar ..	..	6 years
Lower and upper central incisors	..	7 years
Lower and upper lateral incisors	..	8 years
1st premolar or bicuspid	..	9 years
2nd premolar or bicuspid	..	10 years
Canine ..	..	11 years
2nd molar ..	..	12 years
3rd molar ..	..	18 to 22 years

(28) The instructions to School Medical Officers who are whole-time are amended as follows for District Medical Officers doing school health work who need—

(a) Send only term advance programmes.

(b) Carry out—

- (1) Medical inspection of school children.
- (2) Correction of defects including treatment for hook-worm and malaria.
- (3) Sanitation.

(c) Maintain only—

- (1) The individual health record (form Medical 457).
- (2) Tabulation of defects (form Medical 456). Notification to parents (form Medical 606) need not be used as correction in most instances will be done by them and they could instruct the head teachers to send up to the dispensary the children whom the Medical Officers want to treat.

(d) Send the six monthly reports on form Medical 410 to the Divisional Inspector of Schools with a copy to the D. M. S. (H).

(e) Send returns on forms 1 and 2 of work done for the first two terms in the months of April and August, the return for the third term being included in the annual return to be sent by January 30.

(29) All advance programmes, reports to the Divisional Inspector of Schools, and term and annual returns should be sent to the D. M. S. H. who will forward them as follows :—

(a) The advance programmes of all District Medical Officers doing school work will be collected and sent to the D. M. & S. S. at the beginning of each term by the 20th of the months of January, May, and September for information and return.

(b) The six monthly reports to Divisional Inspectors of Schools will be forwarded to them as received.

(c) The returns on forms 1 and 2 should be consolidated into one return for the province and sent by the 5th of May, September and February, to be retained at the Head Office.

INSTRUCTIONS FOR THE GUIDANCE OF SCHOOL NURSES

*To work under direction of Medical Officer—*

1. The school nurse shall carry out the directions of the School Medical Officer or Medical Officer of Health under whom she is posted for work.

*Schools : Where to work—*

2. She shall work in the schools assigned to her of which she should have a list.

*Duties—*

3. Her duties shall consist of—

- (a) Visits to schools.
- (b) Visits to homes.
- (c) Assisting at clinics.
- (d) Keeping of records and making of returns.

*Programme of work—*

4. The nurse shall carry out her duties according to an advance programme by which each school shall receive regular visits and no phase of the work will be neglected.

5. The programme shall be prepared tentatively at the beginning of each school term and in detail weekly. These programmes should be submitted for approval to the School Medical Officer or Medical Officer of Health at the Saturday conferences.

*Head Teacher or Principal to be acquainted of visits—*

6. The head teacher or principal of the school should be notified of her visits by the nurse a week in advance and if, for any reason, she is unable to keep her appointment, the head teacher or principal should be duly informed.

*Work in the School—*

7. The work in the school shall consist of—

- (a) Assisting the Medical Officer in the medical inspection of the school children.
- (b) Correction of minor defects, such as pediculosis, non-vaccination, scabies, and uncleanliness.
- (c) Assisting the Medical Officer in administering hook-worm treatment and anti-typhoid inoculation.
- (d) Inspection of pupils for follow-up, after illness, or when referred by the teacher.
- (e) Inspection of the sanitation of the school.
- (f) Giving instructions in first-aid, home nursing, and care of the child to the teachers and older girls.
- (g) Giving health demonstrations and talks.
- (h) Assisting teachers in organizing and carrying out health education procedures.

*Medical Inspection of School Children—*

8. The nurse will assist the Medical Officer during medical inspection of the school children when required to do so. The date of inspection of a school will be fixed by the Medical Officer at least two weeks ahead and the head teacher or principal notified of it. The nurse will inform the school authorities herself or see that the office does so. When any deviation from the programme becomes necessary, she should bring it to the notice of the Medical Officer promptly to enable him to make the necessary adjustments.

The day previous to the inspection the nurse will get together the individual health record cards relating to the school to be inspected as well as a supply of fresh cards (Medical 457) for new entrants.

On the day of inspection, she will proceed to the school before the arrival of the Medical Officer and prepare a suitable place for the medical examination of the children. A separate room or a quiet part of the school hall with sufficient light should be selected. According to the system in vogue (whether whole school is



to be inspected or only those in the Kindergarten, 4th and 7th Standards) she will sort out and have ready the cards of the children to be examined. She will fill up the headings of fresh cards for new entrants or for those who were absent at the previous inspection. Where possible this may be got done by the school authorities.

Previous to the examination, she will weigh and measure the children, test vision and hearing and record them on the individual health record cards. She shall bring to the notice of the Medical Officer any defective cases for further examination.

At the end of the examination, she shall fill in the record of defects (form Medical 456), the notification to parents (form Medical 354), if it is used, and the reference for treatment (form Medical 606).

#### *Correction of Minor Defects—*

9. In the correction of minor defects in the school, such as pediculosis, non-vaccination, scabies, uncleanness, the consent of the teacher and the children should be obtained. When visiting a school for this purpose, the nurse will take with her the necessary drugs and appliances. At the end of the visit she will enter up, in the record of defects, any corrections made by her and later in the individual health record cards filed in the office.

#### *Follow-up visits—*

10. When visiting a school the nurse will take with her the record of defects (form Medical 456) of that school so that she could follow up the cases that need treatment. She will also inspect those who have had their defects corrected and make appropriate entries in the record of defects. She will also collect the forms Medical 606 that may have been returned by Medical Officers of hospitals at the completion of correction of defects.

#### *Children after illness and those referred by Head Teacher—*

11. At these visits the nurse should inspect all children who have returned after an illness or any referred by the head teacher or principal. If she finds that the children require a more careful examination, she shall bring these cases to the notice of the Medical Officer.

#### *School Sanitation—*

12. In inspecting the sanitation of the school, the nurse shall pay attention to the following :—

- (a) Cleanliness of the school furniture, building, and surroundings.
- (b) The lighting and ventilation of the building.
- (c) The protection from pollution of the drinking water supply.
- (d) The storage of drinking water and the facilities for drinking it.
- (e) The maintenance of the school latrine and urinals; and the provision of ablution water.
- (f) Facilities for washing of hands.
- (g) Storage and disposal of refuse.
- (h) Arrangements for a midday meal, if provided.

When any defects are noted, the head teacher or principal should be informed of it and, when possible, have them remedied on the spot. If defects are of a major nature, they should be brought to the notice of the School Medical Officer or Medical Officer of Health.

#### *Instruction in First-Aid, Home Nursing, and Care of Child—*

13. The nurse should make suitable arrangements with the head teacher or principal in regard to instruction in first-aid, home nursing, and care of the child. The Syllabus provided should be gone through, and at the end a demonstration by the girls who have taken the course will be a useful publicity. The object should be to train the teachers who should eventually teach the children.

#### *Health Demonstrations and Talks—*

14. In giving health demonstrations and talks the nurse should provide herself with a list of them covering the main topics that should be imparted to the children. The subject material of each topic should have the approval of the School Medical Officer. The nurse should make use of suitable situations for giving appropriate talks, e.g., with an outbreak of smallpox, she should drive home the need for re-vaccination; or when there is typhoid, the need for inoculation and the construction and the use of sanitary latrines, &c.



### *Health Education Procedures—*

15. The nurse's function is always to teach healthful methods of living. She should make herself familiar with health education procedures suitable to schools and assist the teachers in organizing them.

### *Relationship with Teachers—*

16. The relationship with teachers is the same as that with parents. Her function is to stimulate in them a real interest in health and to help them to become more aware of the health needs of the children and of the facilities for meeting them.

### *Home Visiting—*

17. In home visiting, the nurse should bear in mind that each visit must have a purpose and that it must be educational both to the individual and the family. Home visits are made for the purpose of—

- (a) Explaining to parents of defective children the nature of the defects found, the dangers of leaving them uncorrected, the advantages of getting them corrected, informing them of the facilities available for correction, and urging them to see that the defects are corrected.
- (b) Instructing the individual child and the family in healthful living.
- (c) Securing the co-operation of the home in the work of the school.
- (d) Getting to know the parents of the children whose health she is looking after.
- (e) Demonstrating to parents the methods of delousing, treating scabies, &c., as often such conditions are present in other members of the family who, if not treated, will re-infect the school child.

The nurse should visit the parents of all defective children. For so doing, she should obtain their addresses from the school authorities and where possible get the school teacher or one of the senior girls to accompany her.

18. Wherever necessary, the nurse should accompany children of the ignorant, poor, or of working mothers to the hospital or dispensary for treatment.

### *Assisting at Clinics—*

Clinics may be held in the school itself or at a central place, such as a health centre, hospital, or dispensary. Clinics held at schools are generally for the treatment of minor defects, such as pediculosis, scabies, uncleanness, non-vaccination, for giving of mass treatment for hook-worm, or for anti-typhoid inoculation. The nurse should assist the School Medical Officer in the conduct of these clinics.

### *Records and Returns—*

19. The nurse should—

- (a) have a note-book which she should carry with her and in which she will make entries of her daily activities,
- (b) at the beginning of each school term prepare a provisional programme for the term from which she will prepare and submit to the school Medical Officer more definite programmes weekly,
- (c) submit monthly and weekly returns of her work on appropriate forms, and
- (d) maintain a register of her work under the following headings :—

Home visits.  
School visits.  
Assisting at clinics.

### *Conferences—*

20. She will attend the Conference at the Office of the School Medical Officer or Medical Officer of Health every Saturday morning when she will submit her report for the week and the programme for the following week. Difficulties, achievements, ideas for improving and developing the work will be discussed.

(Report form for School Nurses.)

DEPARTMENT OF MEDICAL AND SANITARY SERVICES

#### *School Health Work*

Report of school nurse : \_\_\_\_\_

Locality : \_\_\_\_\_

For { week ending \_\_\_\_\_ : \_\_\_\_\_  
      month of \_\_\_\_\_

Number of schools : \_\_\_\_\_

School population : \_\_\_\_\_

Signature of nurse : \_\_\_\_\_

A.—SCHOOL VISITS

1.—Medical Inspection of School Children

<i>Name of School</i>	<i>Total on Roll</i>	<i>Number Examined</i>	<i>Number Defective</i>	<i>Number of Defects</i>

2.—Health Education

<i>Name of School</i>	<i>Number of</i>		<i>Subject</i>	<i>Group</i>
	<i>Demonstrations</i>	<i>Talks</i>		

B.—HOME VISITS

	<i>For Month</i>	<i>For Term</i>	<i>For Year</i>
Number of homes visited ..			
Number of visits ..			
Number of demonstrations ..			
Number of talks ..			
Number of defects corrected as result of visits ..			

C.—CLINICS

1.—School

<i>Name of School</i>	<i>Number of Clinics</i>	<i>Defects</i>					
		<i>Non-Vaccination</i>	<i>De-lousing</i>	<i>Scabies</i>	<i>Un-cleanliness</i>	<i>Hook-worm</i>	<i>Others</i>

2.—Central

<i>Location of Clinics</i>	<i>Number of Clinics</i>	<i>Defects</i>									

## APPENDIX 16

### RULES FOR THE GUIDANCE OF PUBLIC HEALTH MIDWIVES

#### *Residence—*

1. The midwife shall reside in the area approved by the Medical Officer of Health.

#### *Signboard—*

2. She shall put up in front of her residence the signboard supplied by the department.

#### *Supervision—*

3. She shall work under the supervision of the Medical Officer of Health and the public health nurse of the area, who will check up her work. She should carry out all instructions given her in connection with her work.

#### *Equipment—*

4. She shall be responsible for all articles supplied to her for her work.
5. Her equipment shall consist of—

- 1 midwifery bag with washable linings
- 1 thermometer
- 1 pair dressing scissors
- 2 pairs Spencer Wells forceps
- 1 rubber catheter
- 1 kidney tray (size to take forceps, dressing scissors, &c.)
- 1 minim glass
- 1 metal soap box
- 1 nail brush
- 1 Higginson's enema syringe
- 1 drop bottle
- 4 stoppered bottles to fit loops in bag
- 1 wide-mouthed bottle for thread
- 1 yard mackintosh
- 2 bowls, enamelled (12 inches)
- 1 boric dredger
- 1 bed pan (enamel)
- 5 bandages
- 12 feet gauze
- 3 packets 3-lb. cotton wool
- 1 reel cord thread
- 1 horn or aluminium medicine glass
- 2 overalls

#### *Medicines—*

- |                   |                        |
|-------------------|------------------------|
| lysol             | prophylactic eye drops |
| ergot             | olive oil              |
| rectified spirits | Carbolised vaseline    |
| iodine            |                        |

6. She should provide herself with a biscuit tin enamelled black outside for carrying necessary material when she pays post partum visits.

7. The midwifery bag shall be maintained clean both inside and outside. The inside lining shall be washed from time to time. The bag shall be kept ready to be taken out as soon as a call comes. The contents of the bag shall be neatly arranged with bottles properly labelled and instruments and other articles properly stored.

8. She shall take her bag and its contents to the Health Unit Office every Saturday for inspection and replenishing of materials.

9. She shall not make use of her equipment for her own domestic purposes.

10. She shall provide herself with a two-shelf table for keeping her equipment. The table shall be covered with a clean white cloth and nothing other than articles connected with her work shall be stored on it.

#### *Attire and personal cleanliness—*

11. She shall keep her person and clothing (both outer and inner) clean at all times. She shall wear clean white clothing when on duty and shall keep her finger nails short and clean. She shall wear the departmental badge when on duty but shall wear no rings or bangles.

*Routine of work—*

12. On leaving home she shall write on a slate the date and the exact spot to which she is going so that she could be traced by an inspecting officer or by people who want her services. The slate shall be hung up in front of her house in a conspicuous place.

13. She shall work in the area assigned to her and, according to programme made out for her, daily visit designated portions and get in touch with expectant mothers with whom she will make friends, visit periodically, advise and carry them through the period of pregnancy.

14. She shall impart simple ante-natal information to mothers under her care and take specimens of urine for examination according to the instructions of the Medical Officer of Health.

15. She shall make every endeavour to get in touch with mothers as early as possible in pregnancy and to take them to the ante-natal clinic for examination and advice by the doctor.

16. During the period of pregnancy the midwife should watch for: serious or persistent vomiting, repeated headaches, dizziness, puffiness about face and hands, blurring of vision or spots before eyes, neuralgic pains and pains about pit of stomach and muscular twitching.

When any of these are present the mother should be advised to go to her private doctor, if she has any, or to the Government hospital if she has none, and assist her in getting there. The public health nurse and the Medical Officer of Health should be notified of it.

*Other conditions to watch for are—*

amount of urine passed, nausea and vomiting, heartburn, varicose veins, piles, cramps, and leucorrhoea.

17. She should make all necessary arrangements for the confinement either in the home or at the hospital. She shall conduct the confinement in the home.

18. All work done shall be in accordance with the training she has received and instructions of the Medical Officer of Health and public health nurse.

19. She shall look for tears and if any are found she shall bring them to the notice of the public health nurse promptly.

20. She shall make ten daily visits after confinement at which she shall attend to the mother and child. At these visits she shall take the temperature of the mother and make the necessary record. If there is any evidence of sepsis she shall at once report to the public health nurse.

21. In the course of her visits she should instruct an intelligent person of the household or a neighbour how the mother and child should be attended to so that they can receive attention on occasions that she is called away to a labour case and is unable to pay her post partum visit.

22. She shall see that every child delivered by her is registered with the Registrar of Births and Deaths.

23. She shall endeavour to use eye drops as a routine measure immediately after birth.

*Records—*

24. She shall maintain the following records:—

- (a) Pocket note-book.
- (b) Register of mothers under care.
- (c) Statement of confinements conducted and post partum visits made.
- (d) Monthly summary of work done.

25. She shall carry with her the pocket note-book on her rounds and enter in it daily the date, time of departure from and return to her residence, approximate times of seeing expectant mothers, mothers in labour, and nursing mothers, their names, age, race, residence, and nature of assistance rendered. If no entry is made it will be taken for granted that she has done no work for that day.

On return home at the end of the day she shall enter up her monthly summary sheet, and the names of her expectant mothers and other information in her register of expectant mothers.

Record of post partum care shall be entered in her monthly summary sheet as well as in the monthly statement of confinements conducted by her.

26. She shall have in her office a bar diagram showing monthly the number of births in her area and the number of deliveries she has conducted. This will be kept up to date by the nurse.

27. All records should be kept neatly and submitted every Saturday to the public health nurse and the Medical Officer of Health or at any other time when requested by them.

*Services free—*

28. She shall accept no payment for services rendered.



# **APPENDIX 17** **INCUBATION AND EXCLUSION PERIODS OF THE COMMON INFECTIOUS DISEASES**

<i>Disease</i>	<i>Incubation Period</i>	<i>Patients</i>	<i>Exclusion Period</i>	<i>Contacts</i>
Chickenpox	2-3 weeks	Until all scabs have fallen off		Those who have not had the disease, for 3 weeks from date of last exposure to infection
Common cold	12-48 hours and possibly 72 hours	One week from the onset desirable		Nil
Cholera ..	1-5 days usually 3 days ..	Until 3 successive negative cultures of stools or rectal swabs taken at intervals of not less than 24 hours apart		5 days from last exposure or longer if stools contain the cholera vibrio
Conjunctivitis		Until discharges from infected mucous membrane have ceased		Nil
Diphtheria	2-5 days	2 to 3 weeks after end of attack and until 2 cultures from the throat and two from the nose taken not less than 24 hours apart are negative for the Diphtheria bacillus		For children from the same house, one week after removal of patient to hospital or, when treated at home, one week after release from isolation. Negative swabs should be obtained. In the case of children in the same class, only those showing organisms in the throat after swabbing till free of them or one proved to be avirulent
Dysentery	Bacillary 1-7 days Amoebic 3-4 weeks	Till stools come back to normal and free from causative organisms		Nil
German Measles (Rubella)	2-3 weeks	7 days from appearance of rash		Those who have not had the disease, for 3 weeks from date of last exposure to infection
Influenza	24-72 hours	Till fever has subsided		Nil
Measles ..	10-18 days	Three weeks from appearance of rash		Those children who have not had the disease, for 3 weeks from date of last exposure to infection
Mumps ..	12-26 days, 18 days usual	Until one week after subsidence of swelling		Nil
Scabies ..	24-48 hours of infestation	Until adequately treated and cured		Nil
Smallpox	10-14 days	Until disappearance of scabs and crusts		16 days unless recently vaccinated successfully when exclusion unnecessary
Typhoid ..	7-23 days	Until three negative cultures of stool and urine specimens collected not less than 24 hours apart and not earlier than 1 month after onset of disease		Nil
Whooping cough	1-3 weeks, usually 10 days	6 weeks from commencement of cough and 3 weeks after development of characteristic whoop		Non-immune children for 3 weeks from date of last exposure to infection
Poliomyelitis	7-14 days	3 weeks from onset and till patient is fit to resume normal life		Members of family for at least 21 days after the occurrence of each case in family





